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THE
DECORATIVE ART OF BRITISH NEW GUINEA:

A Study in Papuan Ethnography.

BY

ALFRED C. HADDON, M.A.,

PROFESSOR OF ZOOLOGY, ROYAL COLLEGE OF SCIENCE, DUBLIN.

With Twelve Plates.



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By Sir John Lubbock

BY

ALFRED A. WATSON, M.A.

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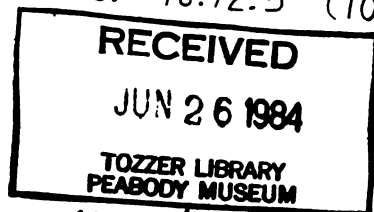
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ROYAL COLLEGE OF SCIENCE, DUBLIN.

With Twelve Plates, Map, and Numerous Woodcuts.



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No. X.

THE DECORATIVE ART OF BRITISH NEW GUINEA: A STUDY IN PAPUAN
ETHNOGRAPHY. BY PROFESSOR A. C. HADDON, Royal College of Science,
Dublin. (PLATES I. TO XII.)

[Read MARCH 16, 1893.]

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INTRODUCTION.

THERE are two ways in which decorative art may be studied; these may be briefly defined as the æsthetic and the scientific. The former deals with all manifestations of art from a purely subjective point of view, and classifies objects according to certain so-called "canons of art." These may be the generally recognised rules of the country or race to which the critic belongs, and may even have the sanction of antiquity, or they may be due to the idiosyncrasy of the critic himself. I am not now concerned with the study of art from an æsthetic point of view; this may be left to

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the art critics ; but I will employ a more precise system of analysis, and it will be seen that the method employed yields results of wider import than the initial inquiry.

The scientific treatment of art naturally divides itself into the physical and the biological. Not much has been done towards establishing a physical or physiological basis for art, nor, for the matter of that, has its biological aspect been systematically studied. It is to the latter that our attention will be confined in the present study, and an attempt is made to deal with decorative art as if it were a branch of biology. I have so far employed the term "art" to signify the Fine Arts in accordance with customary and modern usage. The present essay deals solely with the arts of design—in which are included painting, carving, sculpture, including decorative art; and in the following pages, wherever the word "art" occurs, it must be understood in this more limited sense.

When difficult problems have to be investigated the most satisfactory method of procedure is to reduce them to their simplest elements, and to deal with the latter before studying their more complex aspects.

The physiology of the highest animals is being elucidated largely by investigations upon the physiology of lower forms, and that of the latter in their turn by a knowledge of the activities of the lowest organisms. It is among these that the phenomena of life are displayed in their least complex manifestations, and they, so to speak, give the key to a right apprehension of the others.

So, too, in studying the arts of design. The artistic expression of a highly civilized community is a very complex matter, and its unravelment would be an exceedingly difficult and, perhaps, impossible task. In order to gain some insight into the principles which underlie the evolution of decorative art, it is necessary to confine one's attention to less specialized conditions; the less the complication the greater the facility for a comprehensive survey. Therefore, in the present study the biological precedent has been followed, and the subject is approached, so to speak, from below; not quite at the lowest rung of the æsthetic ladder, for that would not take us far; but the investigation is restricted to a people, who, while having a true feeling for art, are at the same time in the "savage" stage.

New Guinea is still one of the most interesting countries in the world, and, even now, very little is really known of the greater part of the island, and our knowledge of its ethnology is also meagre. Thanks to the labours of certain missionaries, the assimilation of the southern half of the island into the British Empire, and to the energy and enlightenment of Sir William MacGregor the present Administrator, we are rapidly learning more about our recent Australasian possession.

A study of the decorative art of New Guinea, as a whole, would be particularly instructive, but the subject is too extensive for a single Paper, as it would necessarily lead into a discussion of the relation of the art of North New Guinea with that of the southern portion of the Malay Archipelago and that of East New Guinea with the Bismarck Archipelago. Much of the material for the former study exists in Netherlands museums, and for the latter in the German. For the present, at all events, we may leave it to these nationalities to investigate the art of their own dependencies.

The present Memoir is confined to a description of the decorative art of British New Guinea. Fortunately for us the art in our Protectorate is more varied in scope than appears to be the case in either the Netherlands or German territory.

So far as the available evidence goes decorative art is fairly uniform in the northern portion of Netherlands New Guinea, the main exception occurring along the north-east coast from Tabi to Humboldt Bay (*i.e.* from about long. 138° E. to about long. 141° E.) The style of ornamentation of this coast, especially as one travels east, approximates more to that characteristic of German than of Netherlands New Guinea.*

The ornament of Kaiser Wilhelm's Land is fairly homogeneous; but with a little care the following districts can be distinguished:—Humboldt Bay; Krauel Bay, including the neighbouring islands, and Taraway

* The foundation for a study of the decorative art of this region has been laid by Heeren, F. S. A., de Clercq, and J. D. E. Schmeltz, in their important and beautifully illustrated work, "*Ethnographische Beschrijving van de West-en Noordkust van Nederlandsch Nieuw-Guinea*," Leiden, P. W. M. Trap, 1893; as well as by Dr. M. Uhle, in his sumptuously illustrated Memoir, "*Holz- und Bambus-Geräthe aus Nord West Neu Guinea*," König. Ethnogr. Mus. Dresden, VI., 1886.

(Guilbert Island, &c.); Astrolabe Bay, with Finsch Havn; Huon Gulf. One could scarcely be quite sure in every case of the approximate home of objects from unrecorded localities in German New Guinea, but a fair degree of certainty can be attained. As will subsequently be seen we are in a better position with regard to ethnographical specimens from British New Guinea.

In the following Memoir the decorative art of a particular region has been studied much in the same way as a zoologist would study a group of its fauna, say, the birds or butterflies. Naturally, the methods of the purely systematic zoologist neither can nor should be attempted to be entirely followed, for the aim in life of the analytical zoologist is to record the fauna of a district and to resolve the specimens into their appropriate families, genera and species, and not unfrequently he is inclined to make as many new species as possible.

The more synthetically-minded zoologist is anxious to group his specimens into natural assemblages, and is delighted to find those intermediate forms which are the *bêtes noires* of the systematist. To these zoologists the problems of the geographical distribution of animals have a peculiar fascination, and they take pleasure in mapping out the geographical variations of a particular species and in endeavouring to account for the diversity of form and colour which obtains. This is the main distinction between the old and the new zoology. There are still, however, many "survivals" amongst zoologists, and amongst the older naturalists there were always a few who took a more philosophical view of science than most of their contemporaries.

It is impossible to study designs without taking arts and crafts into consideration. Ornamentation is not only conditioned by the stage of artistic evolution at which the people have arrived, but also by the nature of the object which it is desired to decorate, and the tools wherewith to do it.

The so-to-speak necessary or mechanical form for any weapon or utensil is generally extremely simple, but as a matter of fact we rarely find that they are constructed for bare utility. The æsthetic craving has added grace of form, decorative adjuncts, or has more or less ornamented the surface

of the objects themselves. Now, all these must be taken into account in an exhaustive study of the arts and crafts of a people. I regret that, when I first collected materials for a study of the patterns and designs of British New Guinea, I did not sufficiently appreciate these facts. The shape of an object has a history independent of its decoration, and the scheme of its ornamentation is important as well as the details of the designs. It is also a source of regret to me that I have not been able to give enough figures of objects as a whole; but in many cases I have referred to illustrations of them elsewhere. With such a wide field before me, and wealth and variety of objects to select from, I have often found it difficult to decide what should be selected and what omitted. As a general rule I have chosen objects which are common in collections, or from which, as it seemed to me, most might be learned; but there is nothing, however, apparently insignificant, which is barren of interest or instruction, if we had sufficiently full information respecting it. We know so little, because travellers and collectors tell us so little; they scarcely ever inform us where a given object is made, and we are fortunate if we know exactly where they bought it. Even the uses of some objects are not known with certainty, and we are ignorant as to the actual methods of most of the art-work; whether all are artists, or whether skill runs in families; what decorative work is done by women; and, lastly, the psychology of savage artists and the symbolism in their art.

We find that the decorative art of savages is originally almost entirely realistic or suggestive, and that usually natural forms were copied; thus we arrive at the conclusion that the art of a country bears a definite relation to its fauna and flora.

Decorative art is thus proved to be directly conditioned by the environment of the artists, and in order to understand the designs of a district the physical conditions, climate, flora, fauna, and anthropology, all have to be taken into account—another example of the fact that it is impossible to study any subject comprehensively without touching many other branches of knowledge.

I venture to add a few words as to my method of study. The plan which I have adopted in my investigations has been to make notes,

sketches, and, if practicable, rubbings of objects bearing upon my researches in public and private collections. When possible I have obtained photographs; and in a few cases I have only had the latter to study.

Unfortunately it is exceptional to find specimens in museums with accurate localities; often the label simply says, "New Guinea," or "British New Guinea"; others with more pretension to detail give "Papuan Gulf," totally ignoring the number of tribes which inhabit the shores of a gulf which is four degrees wide and a degree and a half deep. Further, the locality "Port Moresby" cannot always be trusted, an object may very well have been brought there which was made a couple of hundred miles away. A few collectors have been careful to give precise localities, and by noting all of them which have come under my notice I have been able to lay down certain general principles concerning the geographical distribution of Papuan art. In drawing such conclusions one is entirely at the mercy of the accuracy with which these objects are labelled. I trust that my general deductions will stand, as, in most cases, I have been able to check the localities given in one museum for a particular class of objects, by those assigned to the same province in other collections. So far as the decorative art of the mainland of New Guinea and the south-eastern archipelago is concerned, my studies have been entirely carried on in museums and libraries, and they consequently lack that assurance which work in the field alone can give. A personal acquaintance of the mainland and islands of the British Protectorate would doubtless make a more detailed classification possible; and it is to be hoped, now that attention is called to this subject, that those who have the opportunity of studying it on the spot will do so, and put the results of their observations on record before further complications arise consequent upon the influence of the white man.

It was not until I had collected and arranged my material, and had written the greater portion of the manuscript, that I seriously turned my attention to the ethnological characters of the people. This I did of set purpose, as I wanted to see how far the decorative art of a people could be employed as an argument for or against ethnological affinity with other peoples. This aspect of the subject will be discussed in the final section.

It will be observed that I have divided the descriptive portion of this communication into six sections which correspond with certain primary districts, each of which appears to be characterised by a particular style of design and ornamentation. As the confines of these regions are not yet precisely limited, and, perhaps, scarcely can be accurately defined, I have preferred to take a broad geographical feature for a designatory name for each district. No one recognises more fully than myself that first attempts must of necessity be tentative, and I hope that when fresh data are accumulated a more precise classification will result.

A tolerably complete study of the decorative art and of all the ornamented objects from British New Guinea would result in an intolerably tedious monograph. I have therefore selected the most characteristic objects of the various districts and those which appear to me to best emphasise the facts to which I wish to draw attention. I am aware that everywhere I have omitted to mention objects which in themselves are worthy of study, and which I hope will receive adequate treatment in the future.

In each section the local variety of an object is described as well as the manner in which it is decorated. An endeavour has been made to lay stress upon the characteristic as well as the distinctive decorative art of a district so as to bring out its relations and its idiosyncrasies. In describing the objects themselves I have attempted to make what may be termed descriptions of species rather than of individuals, but to facilitate future reference, I constantly allude to actual specimens, and give the museum in which they occur, and their catalogue number. I have not attempted to make any definite uniformity in the arrangement of the subject-matter of the various sections, but have dealt with each as it appeared to me to be most convenient; I trust there will be no difficulty in comparing the items with one another. In the spelling of native and geographical names I have followed the rules laid down by the Royal Geographical Society.

It is now my pleasant duty to heartily acknowledge the kindness I have everywhere experienced when collecting the materials on which this Memoir is based. On many occasions I have entered a museum in Britain or abroad, not knowing any one on the staff: on explaining my object every

facility was at once offered, cases were opened, specimens were handed to me, and various conveniences arranged; often, too, was help rendered me at the time, not only by curators and assistants, but also by porters and gendarmes. In some cases (and I would like to specially mention the staff of the British Museum, the Science and Art Museums of Dublin and Edinburgh, and the Municipal Museum of Glasgow) rubbings, sketches, and photographs have been sent to me at various times in order to supplement my studies in those museums. I am also indebted to the Trustees of the Australian Museum in Sydney, N.S.W., for numerous photographs.

I here tender my best thanks to the staffs of the following museums:—British Museum, and the Museum of the London Missionary Society, London; Museum of General and Local Archæology and of Ethnology, Cambridge; Ethnographical Department (Pitt Rivers Collection), University Museum, Oxford; Mayer Museum, Free Public Museum, Liverpool; Albert Memorial Museum, Exeter; Science and Art Museum, Dublin; Free Public Library Museum, Belfast; Science and Art Museum, and Museum of the Society of Scottish Antiquaries, Edinburgh; Kelvingrove Museum, and University Museum, Glasgow; Museum für Völkerkunde, Berlin; Königliches Ethnographisches Museum, Dresden; Städtisches Museum, Bremen; (I was unable to see the collections when I was in Hamburg, as they were being transferred to the new Museum für Völkerkunde; I was informed that the collections at Leipzig were not visible, so I have not seen these either); Rijks Ethnographisch Museum, Leiden; Museo preistorico ed etnografico, which is associated with the Museo Kircheriano, Rome—(I regret that I was unable to see the extensive collections made by Dr. Loria, and now in this museum; they were in packing cases, and Dr. Loria had reserved the right of describing them); Museo Nazionale, Florence; Museo Civico, Milan. There are very few objects from British New Guinea in the Trocodero or the Naval Department in the Louvre, Paris. I have visited numerous other museums in which I have made notes and rubbings of specimens from other regions of Melanesia, &c., but which do not contain anything of importance from New Guinea.

I am also indebted to the following friends who have placed their private collections at my disposal: H. Balfour, Esq., Oxford; R. Bruce,

Esq., Torres Straits; Dr. O. Finsch, Delmenhorst; Prof. E. H. Giglioli, Florence; A. Goldie, Esq., Cumbrae; C. Heape, Esq., Manchester; Rev. A. E. Hunt, Samoa (late of Torres Straits); G. A. Kennedy, Esq., Manchester; J. Edge Partington, Esq., Eltham; Rev. E. B. Savage (late of Torres Straits); Professor Charles Stewart, London; and others. I have also laid my own collection under contribution.

I must also express my indebtedness to my friends, Mr. Edwin Wilson, the artist, who has taken great and ungrudging pains to render the plates which illustrate this Memoir as accurate as possible; Dr. H. O. Forbes, who has read over the proofs and has placed his local knowledge at my service; and Mr. S. H. Ray, who has criticised part of the concluding section, and has given me the benefit of his unrivalled knowledge of Oceanic languages.

DECORATIVE ART OF TORRES STRAITS AND DAUDAI.

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I. General Description and Ethnography of the District.

Daudai is the name given by the Torres Straits islanders to that portion of the New Guinea coast which faces the Straits. It may be taken as extending from the Mai Kussa (Baxter River) to the Oriomo River (Tait River), a distance of about seventy miles. Very little is known of the interior. The country is very flat, and practically forms part of the delta of the Fly River. The only hill near the coast is Mabudauan, opposite Saibai. The coast is fringed with coco-nut palms and mangroves. Mowatta (Mouatta, Moatta, &c.), and Tureture are the best known villages. The former is situated on the west bank of the mouth of the Binature River (Kattau River); the latter is on the coast, between four and five miles east of long. 143° E.

The west bank of the mouth of the Fly River, including the region drained by the Oriomo River (Tait River) is known as Dudi. The similarity of this name with that of Daudai has caused some confusion in the past.

The islands of Yaru, Bobo, and Parama (Parem) are separated by narrow channels from the mainland, and belong geographically and ethnologically to it. The natives of Boigu, Dauan, and Saibai, on the other hand, are related more particularly to those of the western islands of Torres Straits.

All that is known about the Mowatta natives will be found in Beardmore's paper, "The Natives of Mowat, Daudai, New Guinea," and in the "Notes" which follow, some of which are extracts from the writings of W. Wyatt Gill and D'Albertis (*Journ. Anthropol. Inst.* xix., 1890, pp. 459–473; *cf.* also, vi., 1876, p. 216). MacGregor (*C. A.* 1, 1893, p. 35) corrects a statement of Beardmore's which he erroneously attributes to the present writer. Various interesting information is also to be found in the Reports of the Administrator of British New Guinea, some of which are abstracted by J. P. Thomson, pp. 151–171. In the concluding section of this Memoir I refer to the ethnology of this district. As the Rev. J. Chalmers has recently taken charge of the Fly River and neighbouring district, we may shortly expect to learn considerably more about the natives.

Quite recently MacGregor (*C. A.* 1.—1892, p. 43) has visited the mainland portion of this district, and has discovered the Dabu and other tribes. The Dabulai inhabit the country opposite Saibai on the west side of the Paho river; the east side of the river is occupied by the Togalai. These have been driven from a settled village life to the condition of houseless wanderers in their own inland country by the Tugeri and Mowatta people. "Most of the Dabulai are very dark in colour, resembling the Straits islanders in appearance and many other things."

The Badu are a savage tribe living in the country between the Togalai and the Masingara. The latter occupy the country behind Mowatta; their language is different from that of the latter; there are houses for the men, and family houses. They chew the Piper methysticum, one man chewing the root for another man. After describing the process, and comparing it with the ceremonial practices in the Pacific (p. 47), MacGregor adds:—"Here only the chewer and the drinker take any interest in the proceeding; everything is dirty, and the whole affair rather repulsive than otherwise. . . . It is, however, a matter of great interest to find such a

[2*]

custom existing at all at Masingara. It has been seen at no place in the possession east of that district. Some of the tribes of the Fly River know of the custom, and sometimes obtain small quantities of the plant from the inland tribes, but none of them cultivate it themselves or make any ceremonial use of it. It is almost surprising that the tribes of the central and eastern districts do not use the *Piper methysticum* as a beverage, because several species of the plant grow there in the forests.”*

MacGregor concludes his account of this district by saying (p. 48):—

“The ferocious disposition of the Badu tribe is principally owing to reasons the same, or similar, to those that have made the other neighbouring ‘bush’ tribes so savage and dangerous. They have been attacked by Mowatta, Kadawa, and Turituri invaders coming from the east. The previous home of these tribes is still shown on the coast, near to Parama Island, as Tagara Mowatta, Old Mowatta. And they have sustained loss at the hands of the Tugeri invaders from the west, or from the local tribes thrust back on their neighbours by the Tugeri. The Masingara tribe seems to have tolerated these incoming coast tribes from the first, and has always remained on friendly terms with them. This fact alone has naturally made them the enemies of the tribes living inland of them; and so far has this feeling of hostility been carried, that there is not such a thing as intermarriage between Masingara and Badu.”

The first accurate description of the Mai Kussa and Wasi Kussa Rivers and the natives of that region is that by C. E. Strode Hall (C. 5883, 1890, p. 213). Captain Strachan’s account is apparently very misleading and erroneous.

From here to the boundary between British and Netherlands New Guinea the country is a wooded swamp, and is very sparsely inhabited, what natives there were having been exterminated or driven away by the Tugeri head-hunters who live on the other side of the boundary.†

Little is known of the natives of the coast between Mowatta and the Fly River, or of those of the adjacent islands.‡

The Torres Straits islands, both geologically and ethnologically, fall into two groups which strangely enough are coincident. The Eastern Tribe

* Cf. *Journ. Anth. Inst.*, xxi., 1891, p. 204; D’Albertis, vol. ii., p. 197.

† Cf. “The Tugeri Head-hunters of New Guinea,” A. C. Haddon, *Internat. Arch. f. Ethnogr.*, iv., 1891, p. 177; MacGregor, C. A., 105, 1890, pp. 68–75; *Journ. Anth. Inst.* xxi., 1891, p. 200; C. A. 1, 1893, pp. 50–53.

‡ Cf. C. 6323, 1891, pp. 116–118; *Arch. Rev.*, iii., 1889, p. 276; and W. Wyatt, Gill’s “Life in the Southern Isles.”

inhabit the recent volcanic islands of Uga (Stephen's Island), Errub (Darnley Island), and the Murray Islands, Mer, Dauar, and Waier. These people speak a different language,* and have many customs which differ from those of the Western Tribe. The latter inhabit the remaining islands of the Straits; the longitude of 143° 30' E. separates these two tribes. I have recently given so full an account of the Western Tribe† that I need say very little here.

The larger islands at the west entrance to the Straits, including Muralug (Prince of Wales Island) and the neighbouring islands, Moa (Banks Island), Baddu (Mulgrave Island), Mabuiag (Jervis Island), and the smaller islands of Dauan (Mount Cornwallis), Naggir (Mount Ernest), and several others are very hilly and often rocky; they are composed of ancient igneous rocks, geologically they are outliers from the Cape York peninsula of Queensland.‡

Boigu and Saibai are flat marshy islands, and may, perhaps, be regarded as portions of the system of the Fly River delta. There are many small islands, such as Tud (Warrior Island), which are merely vegetated sand-banks.

It is a remarkable fact that though the Muralug natives are in such close proximity to Australia there does not appear to have been much intimate intercourse between them and the Queensland blacks. All the islanders are essentially Papuans, and directly or indirectly they keep up constant friendly relations with certain Daudai tribes.

The Western Tribe is broken up into the following intermarrying groups, Muralug and Moa; Baddu and Mabuiag; Saibai, Dauan, and Boigu; Tud, Naggir, and the other small islands. Certain differences in speech and slight variations in customs also characterise these groups.

I have previously elsewhere pointed out that the Western Tribe have two trade routes, both of which converge on Mowatta. This village may

* Cf. "A Study of the Languages of Torres Straits, with Vocabularies and Grammatical Notes. Part I." By Sidney H. Ray and Alfred C. Haddon.—*Proc. Roy. Irish Acad.*, 3rd ser., vol. ii., 1893, pp. 463–616. Part II. will shortly be published by the Academy.

† *Journ. Anthropol. Inst.*, xix., 1890, pp. 297–440.

‡ "On the Geology of Torres Straits." By Professors A. C. Haddon, W. J. Sollas, and G. A. J. Cole.—*Trans. Roy. Irish Acad.*, xxx., 1894, pp. 419–470.

thus be considered as the port of Daudai. Parama is the mainland trading station for the Eastern Tribe. My investigations on the ethnography of the latter people are not yet fully recorded; I have, however, a monograph in preparation, which will be published by the Cambridge University Press; in this will be given in detail all the information I have collected, together with all the previous observations on both of the tribes of Torres Straits.

II. Surface Decoration.

The ornamentation of flat surfaces is usually accomplished in one of two ways:—(A) By the patterns being carved or cut in the wood or turtle-

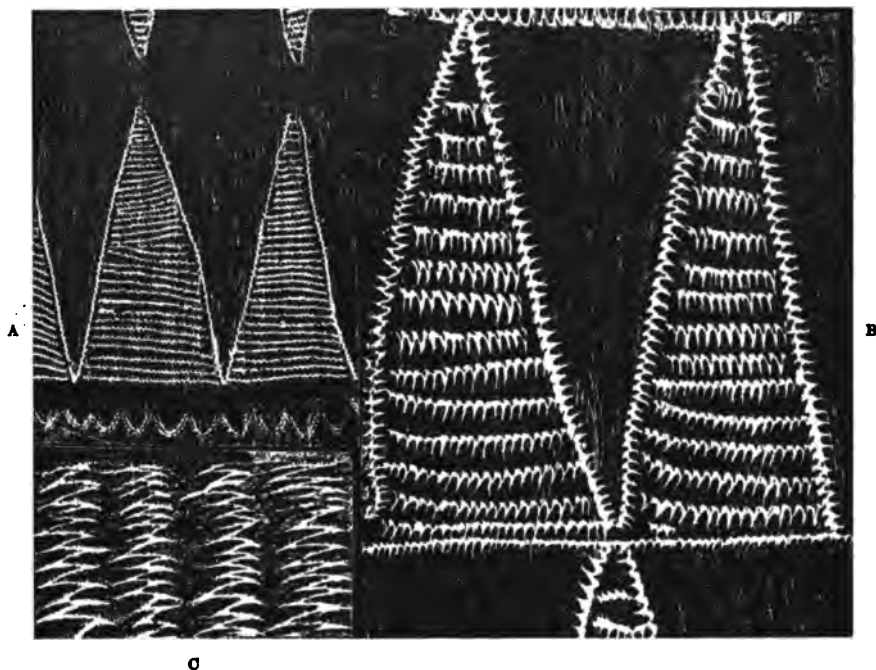


FIG. 1.—Rubbings of part of the decoration of bamboo tobacco-pipes. Natural size.

A. Remarkably minute zigzagged lines on a pipe in the British Museum, said to be from Cape York, but certainly of Straits workmanship.

B. Coarser design on a pipe obtained by Jukes from Erub. British Museum (46. 7-31).

C. From a pipe from the Fly River. Dresden (4489).

In this and the following figure the colours are reversed; the pattern is really dark on a light ground.

shell (tortoiseshell) of which the object to be decorated is made; (B) By designs composed of scratched or punctate lines. (a) Simple incised lines

occur on objects made of pearl-shell, but very rarely on those made of turtle-shell or bamboo. (b) Fine zigzagged lines are very characteristic of this district. The zigzags may be extremely small and close together (fig. 1, A), or they may be boldly rendered (fig. 1, B); all gradations between these two occur in the islands of Torres Straits. At the mouth of the Fly

River the zigzags are coarse and may be very large (fig. 1, C). This technique and the next are almost confined to bamboo objects; they

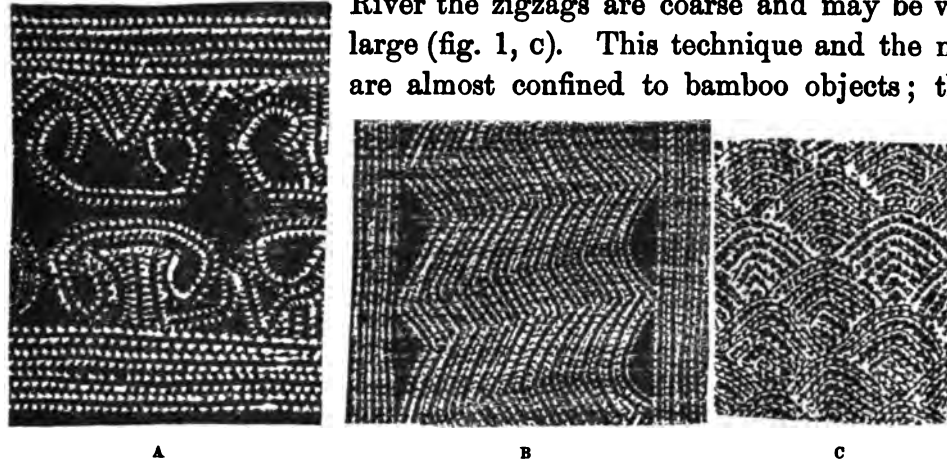


FIG. 2.—A. Rubbing of part of the ornamentation of a panel on a pipe from Mer in the author's possession.

B. Rubbing of part of a band pattern on a pipe from Mowatta in the British Museum (9979).

C. From the bowl of the same pipe.

All these are of natural size.

are rare on turtle-shell, and I do not recollect ever having seen either on pearl-shell. (c) Peculiar to this district are designs etched in punctate lines (fig. 2). Although objects decorated with punctate lines have been brought from Daudai (fig. 2, B and C), this method appears to be pre-eminently characteristic of the islands.

The designs also fall into two categories; (I). Geometrical designs; (II). Representation of natural objects.

(I). GEOMETRICAL DESIGNS.

1. *Carved designs* which are cut in wood or turtle-shell usually take the form of straight lines, zigzags, triangles, diamonds, and chevrons;

these are always inscribed within parallel lines, which in the great majority of cases run transversely to the long axis of the object. A wooden comb from Mer, in my possession (fig. 3, A), illustrates all these points; and in this as in some other instances there is an attempt at making



FIG. 3.

Rubbings of the handles of two wooden combs from Mer; two-thirds natural size. A. In author's collection; B. In British Museum, collected by author.



FIG. 4.

Rubbing of the handle of a wooden comb from Daudai, in the British Museum. One-half natural size.

a pattern symmetrical to the middle line. In another comb from the same island and which is in the British Museum, the design, though simple, is elegant (fig. 3, B), in this specimen conventional eyes are represented, and a grotesque fish (Pl. III. fig. 30) is also engraved on the back. The latter and other combs from Torres Straits are figured on pl. 337 and pl. 334, No. 8 in the "Album." The British Museum has recently obtained several wooden combs, *ipogi*, from Daudai, of which fig. 4 is a typical example.

A similar style of design is common on the turtle-shell bodkins, *ter*, from Mer, on which the pattern may be formed

of deeply cut incised lines or of finely-waved etched lines, or as in the case of fig. 5, c, of both together. These implements were used for piercing the noses of infants and for shredding the leaves of which the petticoats were made; they formed part of a girl's marriage outfit; see pl. 303, No. 5, and pl. 338, No. 7 of the "Album." The turtle-shell ornaments known as *sabagorar* (see p. 33) are usually decorated in a very similar manner (fig. 5, B).

The band-like ornamentation which runs along the lower margin of the "upper-jaw" of the large drums, *warup* (fig. 15, p. 39), is also of the same character (Pl. I., figs. 1, 4, 5-7).

Maino, the chief of Tud, possessed two dugong harpoons (see p. 44), the necks of which were elaborately ornamented. As these are the only two harpoons I know of carved in this manner I reproduce a sketch of one of them on Pl. iv., fig. 64.

Portions of dance-masks and other objects made of turtle-shell are often ornamented with carved band-patterns similar to those already figured. The pattern may, however, vary even in the same band as in fig. 5, A.; this is from the right side of the face of a mask in the Dresden Museum (No. 6396) on comparison with the similar band on the left side (A. B. Meyer, "Masken von Neu Guinea," &c., Taf. II.) it will be seen that the two sides are practically symmetrical with each other; it is probable that the zigzag line which surrounds the chin is intended to indicate a beard, and the rest of the pattern may be the whiskers. Sometimes panels are carved in a free and bold manner; analogous ones, on tobacco-pipes, will be described later on.

The cut-out portion of these comparatively speaking coarse designs is usually filled in with lime, and as the carved surface is usually blackened the designs stand out in bold relief.

ROYAL IRISH ACADEMY.—CUNNINGHAM MEMOIRS, NO. X.



FIG. 5.

Rubbings of patterns cut in turtle-shell (tortoise-shell) objects. One-half natural size.

A. From side of a face on a mask from Mabuiag, in the Dresden Museum (6396).

B. Central part of a *sabagorar* in the British Museum. (Cf. fig. 12.)

C. Upper end of a *ter* from Mer, in the British Museum.

2. *Etched designs* are drawn on objects which have a smooth polished surface. As bamboo tobacco-pipes are the most common objects which are thus decorated I shall describe these first.

Tobacco Pipes (cf. "Album," pl. 318).—The Papuan tobacco-pipe is made of one, or two, sections or internodes of bamboo, there being respectively two or three partitions or nodes for each pipe. One end is always perforated, and the other, which is at the bowl end, is left intact; when a central partition is present it is also perforated. The bowl in this district is an elongated tube which fits into a hole which pierces the pipe near its blind end; the bowls vary in length from 100 to 200 mm., or more. In the islands I believe it is almost invariably a uniform cylinder, and is quite plain or with finely etched simple patterns, whereas on the mainland it has frequently a carved central band. In most parts of the British Protectorate the bowl consists of a twisted leaf. The method of smoking these pipes is so well known that it need not be recapitulated here.

The encircling scar which occurs at each node and marks the origin of a leaf usually forms the base line of a pattern, and appears to have had a direct influence in determining the encircling character of the decoration. The rounded scar of the base of the leaf extends beyond the nodal annulation, and may be itself surrounded by lines.

The pipes readily lend themselves to decoration, and on them we meet with the same kind of ornamentation as on the foregoing objects, but treated in a different and freer manner; the latter clearly being due to the ease with which designs can be scratched on the smooth rind of the bamboo. This has led the artists to employ a more complex kind of pattern, and even to attempt freehand drawing. Designs are very rarely actually cut into the bamboo, and equally seldom do simple scratched lines occur.

Bamboo pipes are sometimes quite plain. When only a little ornamentation is made it first occurs at the bowl end as in a pipe in the British Museum from Erub (46, 8–9, 1), which is figured in Jukes' "Voyage of the Fly," I., p. 165. I gave a similar one to the British Museum from Tud. In these two pipes the pattern is cut into the bamboo.

The remainder of the pipe may be partially or wholly covered with geometrical designs. A beautiful example of the latter is in the British

Museum (E. a. 4). I have sketched this pipe in fig. 6, A.; and part of its decoration will be seen in Pl. II., fig. 14, in its natural size. The characteristic encircling bands are filled up with a variety of patterns; in one band there are patterns which run lengthwise, a feature which is occasionally met with on other pipes. It appears probable to me that the crescentic patterns in this and in a few other pipes are really rounded triangles.

When only a portion of a pipe is enriched with geometrical patterns the remainder may be plain or ornamented with freehand sketches. The finest example known to me of the latter kind is also in the British Museum (6520). Fig. 6, B, is a sketch of this pipe; and some of the patterns will be found in greater detail in Pl. II., fig. 16; as I shall have to refer to this pipe on several occasions I will call it "the snake-pipe." A somewhat similar pipe is figured in the "Album," pl. 318, No. 3 (B. M., 6521).

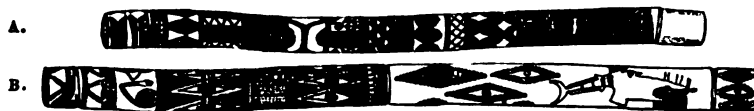


FIG. 6.—Sketches, drawn to scale, of two bamboo tobacco-pipes. One-tenth natural size.

A. British Museum (E. a. 4). No locality. B. British Museum (6520). "Cape York."

The above-mentioned pipes present us with nearly all the varieties of pattern which are to be met with on these objects. The most common form of pipe decoration in Torres Straits consists of encircling lines, the interspaces between which are traversed by widely divergent zigzag lines; the latter form with the base lines a series of triangles. The triangles are alternately left plain or filled in with horizontal or oblique lines; sometimes the latter all point the same way, and a "tooth" pattern results (fig. 1, A, B); or, if in adjacent bands they look opposite ways and their basis coincide, a diamond pattern is formed as in fig. 15, Pl. II. One or more curved lines arising from the base line are often inserted in the blank triangles in order to relieve the bare spaces.

On Pl. II., figs. 17, 18, will be found two kinds of panels which occur on pipes; the panels on fig. 6, B, are analogous to the former. Scarcely

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any two panels are alike ; but those figured may be taken as characteristic examples.

The pipes alluded to above come from the islands of Torres Straits. One or two have been obtained at "Cape York," but in such cases it is never recorded whether they were used by the Australian natives or by the Torres Straits natives who frequent the pearl-shelling and *bêche-de-mer* stations. I myself have seen and photographed a native of Somerset with a bamboo pipe ; but there is no doubt that this is an adopted habit, and it is equally certain that the artistically decorated pipes from "Cape York" were ornamented by Torres Straits natives.

A pipe with finely etched dotted lines was obtained by the Rev. Dr. W. Wyatt Gill at Mowatta (British Museum, 9979). The pattern consists of broad transverse bands, each band being separated from its neighbour by a few lines, and is itself filled up with a series of encircling zigzag lines with rounded apices in one direction (fig. 2, b) ; the whole is very neatly and regularly executed ; on the bowl a scale-pattern is drawn (fig. 2, c).

As this Memoir was going to press the Rev. J. Chalmers has sent some bamboo pipes to London from the mouth of the Fly River ; these confirm the decision I had already arrived at that patterns with coarse zigzag etching and with the ordinary triangles and diamonds, and other simple figures filled in with concentric lines, were characteristic of that locality.

The effect of the Mission Schools is shown by two attempts at printing which I brought home. One Mabuiag woman had cut her name NAGU on a wooden comb (Brit. Mus. "Album," pl. 337, No. 4). The other is a pipe which I obtained in the same island ; and on it is cut $\Pi A \Pi A$ on one side, and MÖRAP on the other ; the latter is the name for a bamboo pipe, and the former I was told was the name of the place in Daudai where the owner had cut the bamboo from which he made the pipe. It will be observed that this name which is really RIRAU, is printed backwards, and the final U is upside down. This pipe is now in the National Museum at Washington, U. S. A. There is also a comb in the British Museum with the following inscription $\Pi A T A$. Here, again, the R is reversed ; perhaps, as in the previous instance, the reading takes place from left to right. I have no record of any proper name which corresponds to this, read

either backwards or forwards. I suspect that the occasional reversing of words is due to the method of counting on the fingers which these people employ. They always begin with the little finger of the left hand, and pass from the thumb of the left hand to that of the right. If a man was spelling out a word letter by letter as if he were counting he might readily fall into the error of putting down the first letter in a place corresponding to the little finger of the left hand, and so on. If the man who carved the former pipe began with RIRAU, that word would utilize all the digits of the left hand, and so MORAP would come right-end foremost on the right hand.

(II). REPRESENTATION OF NATURAL OBJECTS.

1. *Animals.*—Travellers have often remarked that many races, especially the less civilized, are keen observers of nature, and not only distinguish between different kinds of plants and animals, but have definite names for a great many forms.

The Torres Straits Islanders also are very observant, and know a large number of animals by name. This being the case, it is not surprising that they represent animals on such objects as are suitable for the purpose. The bamboo tobacco-pipes are especially interesting in this respect, and owing to the ease with which designs can be etched upon them they are often so ornamented. Familiarity with animals or plants does not necessarily lead to their delineation. Although animals of one kind or another abound in New Guinea, they are by no means constantly introduced into decorative art. For example, in the Massim Archipelago, at the opposite end of British New Guinea, animal forms are also represented; but here only a few animals are copied, whereas in Torres Straits a large number of different animals are delineated, including representatives of most of the great groups of animals. In the Papuan Gulf district animal representations are not particularly common; but from Cape Possession to South Cape animals are scarcely ever drawn.

I am inclined to believe that this discontinuity is mainly a question of totemism. I have proved the existence of totemism in Torres Straits, and

later on I adduce reasons for suspecting its past or present occurrence for some of the Massim people.

The most common animal totems (*augudd*) of the Western Tribe of Torres Straits were the dog, dugong, cassowary, crocodile, snake, turtle, shark, and sting-ray. I have seen four old Mabuiag and Badu women (it will be remembered that these are intermarrying islands) who had totem animals cut on the lower part of their backs;* two of them belonged to the dugong (*dungal*) clan; one to the snake (*tabu*); and one, I believe, to the sting-ray (*tapi*) clan. I understood that the men either had some distinguishing totem mark, or that they were in the habit of carrying about some totem badge. I gave to the British Museum a small wooden carving of a sting-ray, probably an *Urolophus* (cf. "Album," pl. 342, No. 4), which I obtained at Tud, and which was said to have been worn by the owner as a totem badge; Maino said this represented a *tapi*, and similar representations of animals are to be found in several museums; but some of these may be fishing charms.

In dealing with the ornamentation of drums in this district I allude to the representation on them of paired totem animals; and it must be remembered that the drum is largely a religious instrument, and its decoration may well have a more or less symbolic signification. I found in Mer that the men of certain districts only could beat drums at the ceremonies. The not unfrequent occurrence of cassowaries on drums seems to indicate that musicians belonged to the cassowary clan.

In the Berlin Museum there is a string of pearl-shells (vi. 657), on one of which two sharks, facing one another, are etched below a turtle (one of these is copied in fig. 23, Pl. III.) Two tree-frogs (*Hyla*) (fig. 32, Pl. III.) are drawn facing each other, one on either side of the hole for the bowl of a bamboo tobacco-pipe in the Oxford Museum. Two snakes (fig. 34, Pl. III.) similarly occur on a pipe (fig. 6, B) in the British Museum (6520), and two dugong on one in the Edinburgh Museum (1887, 508). To the same category probably belong the bodies and tails of two fish (possibly sharks) on a pipe in the British Museum presented by the Hon. John Douglas. On reference to the sketches on Plate VII. of the Memoir referred to above, it

* Journ. Anthropol. Inst. xix., pl. vii., figs. 12-15.

will be seen that the totem animals were cut on the back in pairs, symmetrical to the median line, and in a manner which recalls the "supporters" of modern armorial bearings. A similar disposition of totem animals (I do not, however, know whether the tree-frog was a totem) on pipes, drums, or other objects, would lead one to infer that, in this case, the figures were employed as emblems of the clan of the owner.

I do not for a moment wish it to be inferred that I regard all animal drawings from this district as totemistic. I certainly do believe that some are, more especially those which are drawn in symmetrical pairs, but not those which are irregularly scattered on pipes. I would suggest that it was on account of the people being in the habit of representing their totem animals that they extended the practice to other forms which were familiar objects about them, or which attracted their attention as being strange or remarkable.

In the following account I shall enumerate in a systematic manner the animal forms depicted, and only incidentally refer to the objects on which they occur; further information on this point will be found in the explanation of Plate III.

Owing to the absence of indigenous mammals in the islands, and the paucity of birds, it is not surprising that these are poorly represented in decorative art. Almost the whole of the animal food of the natives is obtained from the sea; consequently they have a considerable acquaintance with marine animals.

Not many invertebrate animals are depicted. The following is a pretty complete list of those I have come across. On a pipe from Muralug in the British Museum (6521), figured in the "Album," No. 3, pl. 318, two objects are etched (Pl. III., figs. 19, 20), the former of which appears to be a small jelly-fish, one of the Leptomedusæ, and the other a sea-urchin, or, possibly, a sun-star. A star-fish (Pl. III., fig. 21), one of the Asteroidea, is drawn on another pipe in the same collection. A Macruran Crustacean is twice cut on the large Saibai drum in the British Museum; biramous antennules and long antennæ are represented; the eyes appear as if covered by the carapace, as in *Alpheus* (which genus occurs in the Straits); no chelæ are present, and there is a large rosette on the telson.

The centipede (*Scolopendra*) is the only terrestrial invertebrate that I have seen delineated. It occurs on two dugong harpoons, one of which is in the Glasgow Museum (Pl. III., fig. 22; Pl. IV., figs. 58, 59), and the other (Pl. IV., fig. 61) is in the British Museum.

Amongst the vertebrata fish are very frequently represented, especially the sharks and rays. In the Berlin Museum there are six polished pearl-shells (vi. 657) fastened on to a cord, the use of which is not known; on one of these are etched two sharks (one of which is reproduced on Pl. III., fig. 23), and above them is a turtle. These may be representations of the totem, *augudd*, of the owner, who would thus belong to the *baidam* (shark) clan. Amongst other sharks I need only mention the following:—One species, possibly the zebra- or tiger-shark (*Stegostoma tigrinum*), is drawn three times on a pipe in the British Museum (Pl. III., fig. 25). The hammer-headed shark (*Zygæna*), from its strange appearance, naturally excites interest, fig. 24, pl. III., is from an etching on a pipe from Parama in the British Museum. A hammer-headed shark is also drawn surmounting a ceremonial mask on a pipe in the British Museum (fig. 9, A). There is a fine turtle-shell dance-mask representing one of these fishes in the Dresden Museum which has been described by Dr. A. B. Meyer ("Masken, &c., p. 4, Taf. iii.) I was informed at Mer (Murray Island) that a mask similar to the last was one of the sacred objects shown to lads during the initiation ceremonies. I have figured this in my account of "The Secular and Ceremonial Dances of Torres Straits.* Two of these sharks are also cut on a drum, *warup*, in the Cambridge Museum (o. III. 86, 71a). There is thus no doubt that the *Zygæna* was to a certain extent a sacred animal.

Of numerous representations of rays I reproduce but two (Pl. III., pp. 26, 27); the former, on the Parama pipe, appears to be a species of sting-ray (*Trygon*), the spines of which can be seen at the base of the long, thin tail. The latter, on the last-mentioned drum, is probably an *Aëtobatis*.

The largest of the Teleostean food-fishes of Torres Straits are those which are called by the Europeans king-fish (*Cybium commersoni*, one of the mackerels), and queen-fish (*Chorinemus lysan*, a horse-mackerel). One of these, probably the latter, is etched (Pl. III., fig. 28, and "Album," pl. 318,

* Internat. Archiv. für Ethnographie, vi., 1893, fig. 2, p. 15, and pl. xii., fig. 1.

No. 3), on a pipe in the British Museum (6521). Another horse-mackerel is carved four times on the large Saibai drum in the same museum (*cf.* "Album," pl. 332, No. 1, side view).

A queer-looking fish (Pl. III., fig. 30, and "Album," Pl. 337, No. 2) is cut on the back of a wooden comb which I obtained in Mer. I have (p. 16) described it as grotesque; but by this term I do not mean to imply that the native artist gave play to his fancy; I believe he copied sufficiently accurately a fish that was actually before him, and which attracted him on account of its quaint appearance; it may be a larval Gymnodont.

In some respects the most interesting of the bony fishes of this district is the sucker-fish (*Echeneis naucrates*), or *gapu*, as it is called by the natives. I have more than once described the method by which turtle are caught with the aid of this fish.* A *gapu* is cleverly engraved (Pl. III., fig. 29), on one of the pearl-shells of the object (VI. 657) in the Berlin Museum to which allusion has been made. I have already referred to the turtle which was drawn above the two sharks on another of these shells. It appears as if the maker of this object was skilled in catching turtle by means of the *gapu*, or perhaps the band of shells may be a fishing charm.

The only Amphibian I saw in Torres Straits was the common tree-frog (*Hyla cærulea*). Four representations of frogs are known to me; a pair (Pl. III., fig. 32) are disposed about the bowl-hole of a pipe in the Oxford Museum; one on a dugong harpoon in the Glasgow Museum (Pl. III., fig. 31; Pl. IV., figs. 58, 59); and another in the British Museum (Pl. IV., fig. 61). In these two dugong harpoons the tree-frog is associated with a centipede; I do not know why this is the case; it will be observed that the frog looks opposite ways in the two harpoons.

Reptiles are represented in decorative art by turtles, snakes, and crocodiles. The two principal species of turtle are the green turtle (*Chelone viridis*) and the hawksbill turtle (*Caretta imbricata*) from which the valuable turtle-shell ("tortoise-shell") is obtained; the former is very important as an article of food. A turtle (Pl. III., fig. 45), which I take to be the former species, occurs several times on the Saibai drum (B. M. + 3401).

* *Cf.* Nature, xxxix., 1889, p. 285; Journ. Anthropol. Inst., xix., 1890, p. 349; Folk-lore, i., 1890, p. 190.

I do not know of any engraved drawing of a lizard from this district. The only representations of lizards with which I am acquainted are two carvings in high relief, one on a drum (*warup*) from Tud, and the other on an arrow from Mer, both of which, however, were made in Daudai; these I have given to the British Museum. Some arrows (see p. 58), are carved with crocodiles, which have been modified into lizards.

Two coiled snakes (Pl. III., fig. 34) are etched on either side of the hole for the bowl of a bamboo pipe (fig. 6, B) in the British Museum, although this pipe is stated to come from Cape York, it most certainly was made and ornamented by a native of Torres Straits, probably a Naggir man, as two *koimai* or shoulder-cicatrices, as well as two large dance-masks, are also represented. I suspect that the original owner of this pipe belonged to the *tabu* (snake) clan, as I have found two similar snakes* cut on the back of Pattaggam, a Mabuiag woman, who belonged to that clan. The association of totem signs with sacred dance-masks is of frequent occurrence where totemism prevails or formerly obtained. The legends concerning Naga, the master of ceremonies, and Tabu, the snake-dancer, both heroes of Naggir† are instructive in this connection. On the Parama pipe is drawn what I take to be a marine snake (Pl. III., fig. 35).

The Crocodile (*Crocodylus porosus*) is the most formidable animal in New Guinea, and it has more or less impressed itself on the art of the Papuans wherever it occurs. A decorative rendering of one is given in fig. 36, Pl. III.; this is engraved on the Saibai drum, and additional realism is given by the representation of the reptile's tracks. Another crocodile will be found in fig. 25.

Birds are seldom drawn with the exception of the cassowary. Two sea-eagles (*Haliæetus*) which have captured fish (Pl. III., fig. 38) are etched on a pipe (6521) in the British Museum, and two flying birds, probably a kind of sea-gull, occur on a pipe (vi. 860) in the Berlin Museum (fig. 10). The cassowary (*Casuarius*) is often cut on drums (fig. 17, A, C) and its salient features are carefully noted. A drum (*buruburu*) in the Cambridge Museum (O. III., 86. 71) has on each side of the tympanic end a representation of a

* Journ. Anthropol. Inst., xix., pl. vii., fig. 15.

† Cf. Folk-Lore, i., 1890, pp. 179, 180, 192.

cassowary pecking at a seed, and their tri-radiate footprints are also shown (fig. 17, c, and Pl. III., fig. 37).

A capital outline (Pl. III., fig. 39) of a dolphin (*Delphinus*) occurs on a pipe in the British Museum. The dugong (*Halicore australis*) is the only mammal which is frequently represented in the art of Torres Straits. On a drum (fig. 15), the outlines of two dugong are incised, the characteristic shape of the tail is accurately reproduced, and the spouting is conventionally represented by three lines emanating from the nostril (Pl. III., fig. 41). In both cases where I have noticed dugong cut on the backs of women the same three lines occurred, as will be seen on reference to the rough sketches, figs. 12, 13, on Pl. VII. of the Journ. Anth. Inst. XIX. On this drum the water is indicated by three $\vee$ shaped lines and a dash. A pair of dugong are engraved on a pipe (1887, 508) in the Edinburgh Museum, in a position similar to the frogs and snakes on pipes previously mentioned. All the rind is removed from the pipe except a band near the bowl end; the scanty ornamentation is in zigzag lines, but the dugong are etched in simple lines. This latter is of very rare occurrence in bamboo. The lines on the dugong illustrate the manner in which the flesh is cut off the carcass. On the Parama pipe there is a rough drawing (Pl. III., fig. 40) of a dugong with a rope lashed on to its tail. Two dogs (*Canis dingo*) are cut on the Saibai drum (Pl. III., fig. 42).

On looking over the rubbings and tracings of animal drawings from Torres Straits which I have collected, I find that over twenty different animals are represented, the number of drawings being more than fifty in number. A glance at the representative selection on Pl. III. will show that the animals are drawn with a very fair degree of accuracy, so that in most cases it is perfectly easy to identify the genus of the animal intended. There are numerous little touches which will appeal to the eye of the naturalist as indicating keen observation on the part of the artists: for example, the sharks are always drawn with heterocercal tails; the double line running across the caudal fin of fig. 28, Pl. III. represents "a longitudinal keel on each side of the tail"; several characteristic details are, as a rule, well brought out in the drawings of the cassowaries. On the other hand there are several anatomical mistakes, as for instance giving

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shark-like gill slits to the teleostean fish (Pl. III., fig. 28), and I have also seen similar gills given to a crocodile; again, the cloacal orifice of the crocodile in fig. 36, Pl. III., is placed on the dorsal surface of the body. In dealing with the decorative treatment of the crocodile on certain carved arrows from Daudai I give a detailed comparison of the artistic representation with the animal itself.

I have already alluded to those animals which are found paired on pipes (tree-frog, snake, dugong), and later I refer to those found on drums (hammer-headed shark, cassowary, dugong); the remaining animals are arranged in no special order on the pipes, and I am inclined to regard them as belonging to a different category from the paired animals. In describing the drums I point out the exceptional character of the decoration of the large Saibai drum (+ 3401) in the British Museum.

2. *Men*.—Drawings of themselves by the natives are less successful than their representations of animals. On the Parama pipe, in the British



FIG. 7.

Facsimile of a warrior, drawn by Maino, chief of Tud. Natural size.

Museum, are two figures of men drawn in the act of harpooning dugong (Pl. III., figs. 43, 44). For an account of this operation see Jour. Anthropol. Inst. xix., p. 350. In the smaller figure the rope is shown fastened to the dart (Pl. IV., fig. 53) at the butt-end of the harpoon. There are also human figures on the Saibai drum to which allusion has so frequently been made, one of these (Pl. III., fig. 45) represents a man who is holding up a turtle. A man decked for a secular dance (fig. 16) is carved on each side of a drum in the Museum of the London Missionary Society.

A more life-like drawing (fig. 7) of a man was made by my friend Maino, the chief of Tud, in my notebook. It represents a warrior with bow and arrow, and wearing the groin shell-guard, *lorda*. He is decorated in the same manner as the man in fig. 16, except that he has a head-dress of cassowary feathers and a gauntlet, *kadig*, on his left fore-arm.

It is worth recording that Maino drew the right-hand side of the figure, from above downwards, with his right hand, and then, transferring the pencil to his left hand, completed the left side.

One of the most interesting of the human representations is that on a pipe in the British Museum (6521). It evidently represents a *merkai*, or man dressed up for a funeral dance (fig. 8, A). The upper part of this figure is sketched in the "Album" (pl. 318, No. 3), and I have also reproduced it in my Paper on "The Secular and Ceremonial Dances of Torres Straits" (Internat. Archiv. f. Ethnogr., vi., 1893, p. 157, fig. 8), together with an *ipikamerkai* which Maino also sketched in my note-book (fig. 8, B). In the latter the dancer is holding the two brushes, which are a female determinative; the long woman's petticoat, *gagi*, is also represented.



FIG. 8.

A. Tracing of a *merkai* etched on a pipe (6521) in the British Museum, from Muralug.

B. Drawing of an *ipikamerkai* by Maino.

3. *Various Objects*.—On a British Museum pipe (6520) two large dance masks, *krar*, are cleverly etched. This pipe is stated to have been obtained at Cape York—I have already stated my reasons for assuming it to be of Torres Straits manufacture. The larger of these (fig. 9, B) is one of the most ambitious native drawings I have seen. The main body of the mask represents, I believe, one of the large mackerel-like fishes (Cybium or Chorinemus) previously alluded to. The lower jaw is furnished with the usual grass beard and seed rattles. Above the snout are stuck the white feathers of the egret, and in front is a small turtle-shell fish (? the pilot fish, *Naucrates ductor*), which is commonly to be found in this position in these masks. Above is a human face and arms; behind these is a tall triangular

erection surmounted by what I take to be a tuft of the plumes of a bird of paradise, and a triangular piece of turtle-shell with a circular tip; the latter object is of unknown significance, but which is frequently fastened to such masks. The smaller mask (fig. 9, A) is little more than a man's face on an animal's (? crocodile's) head, the whole being surmounted by a hammer-headed shark (*Zygæna*); three crescentic ornaments project behind. I do not know what the three lines in front are meant for. A third mask (fig. 9, c), very similar to the first, is etched on the pipe in the Oxford Museum, on which the two tree-frogs occur (Pl. III., fig. 32). In this case, I believe the body of the mask represents a shark, as the gill-slits are visible,

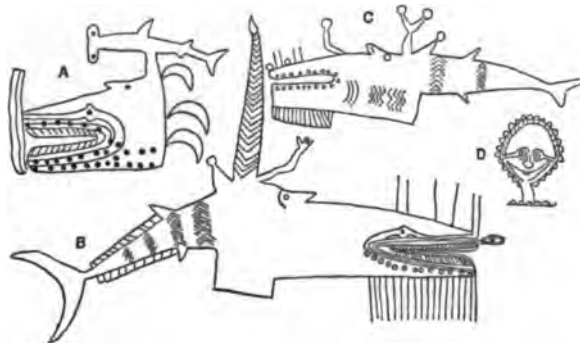


FIG. 9.—Tracings of etched representations of dance-masks on bamboo-pipes.

A and B. British Museum (6620). Cf. fig. 6, B.

C and D. Oxford Museum.

and the tail is heterocercal. On the same pipe are several representations of the human face (fig. 9, c), but very likely these are intended for small dance masks.

Those who are familiar with the splendid series of masks from Torres Straits in the British Museum, or with the next best collection in Dresden,* will be readily able to appreciate what these native artists intended to represent. I have given an account and illustrations of the use of similar masks in the *International Archiv. für Ethnographie*, VI., 1893, p. 131. Other masks in the British Museum are figured on pl. 327, 328, 329 of the "Album," and one by Jukes, vol. i., p. 168.

* Cf. Dr. A. B. Meyer, "Masken von Neu Guinea, und dem Bismarck Archipel." Dresden, 1889.

I know of only two attempts at representing a landscape, both of which are etched on tobacco-pipes. One in the Oxford Museum, which I obtained at Mabuiag, was evidently a representation of that hilly island. The second (fig. 10) is in the Berlin Museum (vi. 860). I have little doubt that the island of Mer is here intended, on account of the shape of the hill and the presence of dome-shaped structures, which I take to be the bee-hive huts which

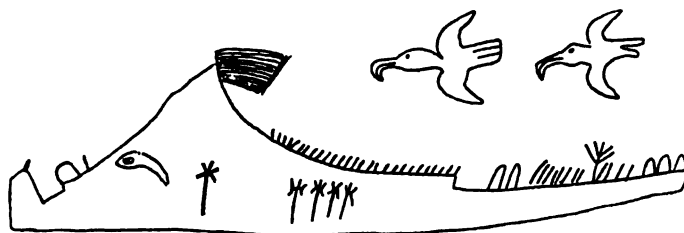


FIG. 10.—Tracing of a landscape etched on a tobacco-pipe in Berlin (vi. 860). A little less than half natural size; the length of the original picture is 198 mm.

characterise the Eastern Tribe of Torres Straits. I add, for comparison, a rough sketch I took of this island, as seen from the south-west-by-west. The natives have a legend that this hill, "Gelam," was originally a dugong, and I believe the eye-mark in the native's drawing is intended for the "eye" of Gelam, and the projection to the right to indicate "Gelam's nose," a small jutting rocky escarpment at the head end of the island. I take it that the break in the ground of figure 10, below the first bird,

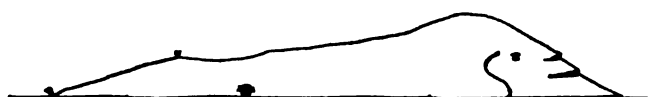


FIG. 11.—Sketch of Mer by the author, from the south-west-by-west, showing the hill Gelam.

indicates the hill *Korkor*, which forms the tail of the dugong in my sketch, and which is the end of the original crater. The part extending beyond this is the lava-flow which forms the north-eastern half of the island.* The vegetation is suggested in a very perfunctory manner. I do not know what the lines that stream from the apex of the hill are intended for. I should add, that to make it approximately topographically

* Cf. my Map in Trans. Royal Irish Acad., xxx., 1894, pl. xxii.

accurate, the native picture should be reversed, assuming my identification to be correct. What I imagine to have occurred is as follows;—The artist intended to represent Mer (Murray Island), and he drew the peak of the principal hill, Gelam, from a very characteristic point of view (I have sketches of my own similar to this); in order to give a realistic touch he added the eye. The view is suggestive, but it is an impossible one, and it appears to me that this is characteristic of a great deal of the pictorial art of savages.

The tops, or teetotums, from Mer are made of a very fine-grained volcanic ash, and their flat upper surfaces are now often painted by the natives with oil paint, or other colours obtained from the white man. Amongst other objects represented are men, birds, fish, and ships. On one which I gave to the British Museum, a pearl-sheller's lugger is depicted, containing a pumping-engine with its handles and the tender, below is the diver holding a bag in one hand and the life-line in the other; the air-tube is also drawn. Mr. C. H. Read has given an account of some of these teetotums.*

III. Personal Ornaments cut in the Flat.

Some of the personal ornaments worn by the natives in Torres Straits are worth special notice. I will deal only with those that are carved out of pearl-shell and turtle-shell.

An ornament common to these people, and to most of the Papuans, is a breast ornament made of pearl-shell (figs. 7, 16); the shell is cut into a crescentic form, and it varies in size from a crescent 173 mm. in direct length to quite small objects. They are usually plain, or may have a simple narrow pattern scratched round the edge, or a border of small pits. Often they are provided with divergent spurs similar to those on the crescentic *sabagorar* (fig. 12, I, K, L). In the Eastern tribe it is called by the same name, *mai*, as the pearl-shell itself; the Western people call it *mari*, or *danga mari*, "tooth of pearl."

* "Stone Spinning Tops from Torres Straits, New Guinea."—Journ. Anthropol. Inst. xvii., 1887, p. 85. Cf. also, "Album," pl. 319, Nos. 1, 2.

I suspect that the pearl-shell ear-pendants* were suggested by small examples of the breast ornament. They are provided with a central shank, which is perforated above, and usually with a pair of spurs below. They often have an elegant form. I only obtained them at Mer, where they are called *mai lebb* (*lebb* is the rim of the ear).



FIG. 12.—Turtle-shell ornaments, *sabagorar*, worn in Torres Straits, from specimens in the British Museum; photographed by Mr. H. Oldland. The ratio of size of the illustrations to the original is as 4·15.

A. Ordinary fish-hook, made of turtle-shell.

B-L. Series of ornaments, probably derived from fish-hooks.

The *sabagorar* is a very interesting turtle-shell ornament of varied form which was worn by the girls, and formed part of their marriage outfit. This certainly was the case in Mer; but I do not know how far the custom extended in the Straits.

* Cf. "Album," pl. 335, figs. 9-11.

The largest and finest specimens consist of a crescent of turtle-shell, with horns produced into an incipient helicoid spiral (fig. 12, κ), and a central bar perforated at the end for suspension. There is a second hole near the base of the shank, and a third in the middle line of the greatest curvature of the crescent. At the latter spot are a pair of divergent spurs, and another pair occurs on each side, usually at the same level as the insertion of the shank. Bands decorated with various patterns run across the crescent at these three levels, and there is usually a little ornamentation on the shank, just below the uppermost perforation. The two finest and best decorated specimens known to me are in the Liverpool (1. 10. 85. 16. L) and Glasgow (89. 67. ck) Museums. They have respectively a total length and breadth of 143×179 mm., and 170×173 mm. The shank in the latter specimen is very long; it was obtained at Mer by Mr. R. Bruce. The example (fig. 12, κ) I obtained at Mer, and gave to the British Museum, measures 146×138 mm. I obtained a somewhat smaller specimen (fig. 12, L) in which the horns are fused with the shank. In smaller specimens (fig. 12, H, I) the horns are in the same plane as the rest of the ornament. The latter of these was attached to a whole bundle of betrothal ornaments. This and other ornaments are figured on pl. 338 of the "Album," where Mr. Partington has adopted my interpretation of these objects. Fig. 12, B-F, illustrate several examples of the simple form of this ornament. These may be neatly made and variously decorated; but some are coarsely fashioned, of uncouth form, and without ornamentation. In fig. 12, G we have two single specimens tied back-to-back; these are also figured in the "Album" (pl. 334, No. 2).

A complete set of a Miriam girl's betrothal outfit, besides such trinkets as small cowrie and ovulum shells, strings of *kus* (Job's tears), nose ornaments, and so forth, would include triangular pieces of polished cone-shells, *o*, turtle-shell bodkins, *ter* (cf. p. 16), turtle-shell fish-hooks *mekkek* (fig. 12, A), and *sabagorar*. Some of these objects are purely decorative in character; others, such as the bodkins and fish-hooks, were useful. I suspect the white triangular shells were for the purpose of betraying the girl's whereabouts by their clanking noise; they resemble public bells on a small scale, and probably had a significance which is now lost.

The fish-hooks were used in pairs, each being tied at the end of a piece of thin string of sinnet; but they admit of very little decoration. I imagine that in the attempt to ornament them they had to be so broadened in order to take a pattern as to render them of little use as fish-hooks. The desire for ornament, combined with the traditional wearing of hooks, led, according to this view, to the adoption of a purely ornamental hook. Once this step was gained the further development into a large and handsome ornament could readily be accomplished. Analogous examples of this form of evolution are everywhere to hand. The duplication of the hook to form the anchor-like variety is also a perfectly natural development. Two fish-hooks lying back to back, as they often would do when hanging down a girl's back, would suggest the apposition of the ornament; and two similarly placed are seen in fig. 12, a. It is only a short stage making one ornament instead of two fastened together. The specimen H, in fig. 12, is very suggestive of this transition. I do not know what is the significance of the spurs. Specimen L, fig. 12, is clearly a degradation of such a form as K, fig. 12. If my hypothesis be correct, we have here a primitive form, intermediate types, the highest specialized derivative and its degenerate modification, all lying side by side.

It was also in Mer that I discovered a pendent chest ornament which was made either from pearl-shell, *maii weapu*, or from the black shell of a pinna, *maub weapu*. These were worn both by men and women. After a great deal of trouble I found out that *weapu* was the name of the larva of the ant-lion (*Myrmelion*); this then gave me the clue as to the meaning of the ornament. One or two of those that I collected were of better workmanship than the others; they were made of pearl-shell, and were similar to that drawn in fig. 13, B; the others were roughly cut and carelessly finished off. It is permissible to regard the former as being more or less original designs, and the latter as unintelligent copies of them, which is the usual fate of copies. Now, the former may very well be conventionalized representations of the larva of an ant-lion, as may be seen on comparing figs. 12, A and B. The long jaws, the three pairs of legs, and oval body are indicated; the latter, too, has transverse lines suggestive of segments. In

[5*]

some ornaments the body and appendages are completely margined with short lines, which are evidently meant for the hairs of the insect. I have sketched in fig. 13 four examples of degeneration which require no further comment except the last, which is doubled, and in this respect I believe is unique.*

The history of this ornament is not less interesting, as it offers a good lesson of the caution that is necessary in dealing with such subjects now that facility of transport has led to intercourse between peoples who a few

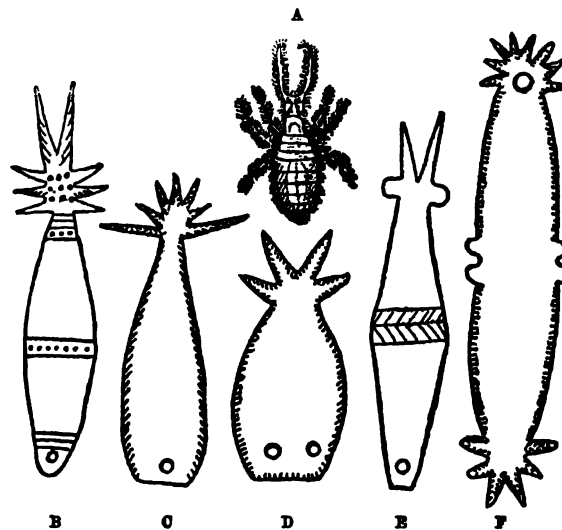


FIG. 13.—Series of pendants in the British Museum, collected by the author in Mer. In all cases the ornament is worn with the perforated end uppermost. Above is a sketch of the larva of an ant-lion, about natural size. The pendants are all of pearl-shell, except the last but one (F), which is made of the black shell of the pinna; two-thirds of the natural size.

years ago had never heard of one another. Owing to the interest I took in these objects I elicited the information that they were first made by a native of Tanna, one of the New Hebrides, who was shipwrecked on Mer several years previously, and that the natives had copied his original design. This clue is worth following up by anyone who has the opportunity.

From the same island I obtained a turtle-shell fish, *totoam*, which apparently was a neck ornament ("Album," pl. 335, No. 8). Similar to this is

* Cf. "Album," pl. 335, Nos. 1-5.

a sting-ray, *tapim*, of which the tail is broken off. The last may be a totem representation, and it may be compared with a wooden totem figure ("Album," pl. 342, No. 4) which I obtained at Tud; all the above are in the British Museum.

There are numerous examples of this kind of art which it would be tedious to enumerate; cassowaries, fish, &c., are often cut out of turtle-shell and fastened on to dance-masks.

IV. Carvings in the Round.

It is not necessary to more than briefly allude to some of the small carvings in the round of the Torres Straits islanders.

A small carved sting-ray, *tapi*, from Tud has already been mentioned (p. 22). In the Liverpool Museum there is a well-executed shark (*Car-charodon*?) (fig. 46, Pl. iv.). There is a beautifully finished model (Pl. iv., fig. 47) of the head of a sucker-fish, *gapu* (*Echeneis naucrates*), from Naggir, in the British Museum (6920).^{*} There are a couple of stone fish-charms, *gwiss* (Pl. iv., figs. 48, 49) in the Glasgow Museum; they were obtained in Mer; but they are poor specimens of native art.

One of the best carvings from this district in any museum in Europe is an old turtle charm, *waru* (Pl. iv., fig. 50), that I obtained in Tud ("Album," pl. 342, No. 1). This used to be placed on the bow of a canoe when starting on a turtling expedition, so as to ensure good fortune.

Birds' heads are often cleverly carved ("Album," pl. 323, Nos. 4, 5), at the end of sticks about 80 cm. (31 inches) in length, which formed part of the decoration of the sterns of canoes. Smaller ones are employed to form the framework of masks.[†] When the sticks were broken the head-ends were utilised as ornaments held in the hand during dances. Such a specimen is in the British Museum (6921) from Naggir,[‡] and another in the Dresden Museum (6409) (Pl. iv. fig. 51). Dance ornaments of this

^{*} Cf. "Album," pl. 334, No. 4.

[†] Cf. Jukes, "Voyage of the 'Fly,'" I., p. 168; "Album," pl. 329, No. 1.

[‡] Cf. "Album," pl. 334, No. 3.

kind (fig. 14) are usually decorated with feathers and large empty seed-vessels, *goa*, Job's tears and other objects. Quite recently the Rev. J. Chalmers has sent over a number of small carved wooden birds' heads and dugong, mostly of rude workmanship, with a spike at one end; they are

coloured red, and decorated with feathers, &c. He describes them as "*Agumanakai*, charms stuck in canoes when going turtle or dugong fishing."

The commonest objects in wood are dugong charms; those *dunngal* of the Western Tribe are usually of large size (half a metre or so in length), and are hollowed out above, the cavity being filled with *lukup* ("medicine") to render the charm more potent.* I brought home one stone specimen, with no cavity, from Tud ("Album," pl. 345, No. 1). Small (about 150 mm. long), and usually well-carved wooden models of dugong, *degger*, are common from Mer. These are solid, and often accurately represent the characteristic features of this large marine mammal (Pl. iv., fig. 52).

Human representations in wood are not frequent. A recent and a very old tobacco charm, *suggob madub*, from the Murray Islands, are sketched in the "Album," pl. 342, Nos. 2, 3. Of the latter I may say that I saw a number of specimens which were collected by my friend the Rev. A. E. Hunt, the then resident missionary, who kindly gave me several of them, although they were very old and much worn, and broken, still there was very great character in the contour of some of the faces, so much so that they gave me the impression of being either portraits, or, at all events, realistic, and not idealized, faces. These are, however, little more than thin slabs of wood.



FIG. 14.

Carved wooden dance ornament, held in the hand. Copied from a photograph of a specimen in the Australian Museum, Sydney.

* Cf. Journ. Anthropol. Inst., xix., 1890, p. 352, pl. viii., fig. 1, pl. ix., fig. 4; and "Album," pl. 325, No. 2.

I obtained two love charms, *neur madub*, from the Eastern Islands in the form of nude girls, both with scarifications on the chest and elsewhere.*

Fire charms, *zole*, were common in Mer, and were carved in stone; they were always in the form of a woman who was generally represented as being pregnant. The best carved one I have seen is one I gave to the British Museum, and is carved out of Brainstone coral.†

Rain charms, *doiom*, are oval stones rudely carved to represent a man's head and body; the arms are flexed, but the legs are not indicated.

The very remarkable turtle-shell dance-masks (fig. 9) worn by the men of this district, more particularly by the islanders, in religious ceremonies, deserve a more extended notice than I can give to them here. I shall describe them in my monograph of the Islanders.

V. Implements.

I propose dealing with only a few implements, selecting those which are generally more or less decorated.

1. *Drums*.—Two kinds of drums, the *warup* and the *buruburu*, are made in Daudai (and Dudi?) and exported to the islands of Torres Straits; they are figured side by side on p. 231 of Rev. Dr. W. Wyatt Gill's "Life in the Southern Isles."

(1). The *warup* (fig. 15) is a large hour-glass shaped drum, which has an average length of about 915 mm. (3 feet), and has an average diameter at the tympanic end of about 200 mm. (8 inches). The circular tympanum is the skin of a *Varanus* (locally called "Iguana" by the Europeans); it is kept in position by a plaited or twisted band, usually numerous pellets of beeswax are stuck on the drum, the effect of which probably increases the

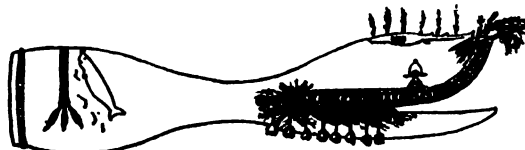


FIG. 15.—Sketch of a *warup*, which formerly belonged to the Rev. E. B. Savage.

* Cf. Journ. Anthropol. Inst., xix., pl. vii., figs. 16–20; and "Album," pls. 343, No. 2, 344, No. 2.

† Cf. "Album," pl. 345, No. 2.

richness of the sound. The diameter of the central constriction is from about one-half to one-third of the greatest diameter of the drum. The other end is cut to represent an open mouth, the gape of which extends in some cases nearly to the middle of the drum; the border of the upper jaw has a gentle upward curvature, whereas that of the lower is cut in a straight horizontal line, and ends in a square symphysis. The upper margin of the lower jaw is decorated with cassowary feathers, ovulum shells, and often with rattle seeds, *goa* (*Pangium*

edule); the apex of the upper jaw is similarly adorned. In a specimen in the Dresden Museum (6357) the band of the tympanum is ornamented with cassowary feathers.

Two designs are invariably present on the *warup*; these are the pattern which margins the upper jaw, and a band pattern saddling the drum near the tympanum.

The former (Pl. I., figs. 1, 4, 5, 6, 7) consists of the geometrical patterns characteristic of this district. About the middle of the jaw is a triangular ornament, the apex of which terminates in a crescent. The base of the triangle is usually occupied by a circle or a black spot; rarely this is replaced by a triangle (Pl. I., fig. 6); and in a drum in the Cambridge Museum there is here a human face (Pl. I., fig. 4).

In the Museum of the London Missionary Society, London, there is a *warup* from Saibai, in which there is at this spot a representation of a man dressed for a secular dance, *kap*, wearing a *dri*-headdress, crescentic pearl-shell ornament, *danga-mari*, and a belt, *wakau*; leaves are inserted in the armlets, *musur*; below the knee are the *makamak* leglets; and round the ankle are the coco-nut leaf *brua*; in his hands he holds leaves (fig. 16). I am inclined to consider this introduction of a man as a vagary.



FIG. 16.

Rubbing of part of the ornamentation of a *warup* from Saibai, in the Museum of the London Missionary Society.

A *warup* from Erub is figured on p. 176, vol. i. of Jukes' "Voyage of the Fly." If this figure is accurately drawn there can be no doubt that what I have termed the jaws of the drum are really intended to represent the jaws of some animal, probably those of a crocodile. The geometrical patterns represent the teeth; the continuous zigzag line which alone occurs in Jukes' figure, where it occurs on both jaws, is present in nearly every drum I have examined, but only on the upper jaw. The spot in the triangular area of most drums is the homologue of the large, simple eye in Jukes' figure. There is a *warup* (Pl. I., fig. 1) in the British Museum (C. C. 6915) from Prince of Wales Island, which forms an interesting connecting link, in this respect, between the figure in Jukes' "Voyage" and the ordinary carving on drums. The crescent, with pendant horns surmounting the triangular area (as in fig. 3, Pl. I.) is a representation of the white feather head-dress, known in Torres Straits as *dri*. This may be so conventionalized as in figs. 4, 5, 6, and 7, Pl. I., that the *dri* may be unrecognisable as such, but when I asked the natives what this ornament was they always called it "*dri*." In a drum in my possession that particular form of *dri* is carved (Pl. I., fig. 2) which is worn by the Fly River natives when on fighting expeditions. There is a similar one in the Dresden Museum (6357).

The band-like ornament at the tympanic end of the *warup* varies considerably in design. The most elaborate of those that I have seen is on the large Saibai drum in the British Museum. Figures 8–12, Pl. I., sufficiently illustrate the general character of this band. I am unable to explain the central appendages in fig. 8, Pl. I.; they are not alike on any two drums, and may as often be absent as present.

On a *warup* in Cambridge (o. III. 86. 71a) a pair of hammer-headed sharks (*Zygæna*) are engraved on the swollen portion of the tympanic end, and in the middle line there is a ray (Pl. III., fig. 27). A pair of dugong (Pl. III., fig. 41) appear in a similar position on a *warup* (fig. 15) from Saibai which belonged to the Rev. E. B. Savage, who was then resident in Mer; and in a corresponding position are the two cassowaries on the large Saibai *warup* in the British Museum (C.C. 3401).* As I have so often referred to

* Cf. "Album," pl. 332.

this drum, I may as well give a caution respecting it. I was informed by the natives that it was made, according to special instructions, through the chief of Saibai, for the Rev. Dr. S. Macfarlane, just before that energetic missionary finally left Torres Straits. It is a remarkably fine specimen, and is the largest I ever saw (1070 mm. in length, and 280 mm. in greatest circumference). In addition to the typical ornamentation of this class of drum, as described above, this example is crowded with various figures which, though of considerable interest from an artistic point of view, are quite out of place on a drum. The crowding of the figures and their inappropriateness evidently prove an endeavour on the part of the artist to make his drum as "flash" as possible. The outer border of the tympanic band has an addition of the busts of two human figures in a strained attitude, and three oval medallion faces encircled by two lines; the latter are evidently copies of English or American postage stamps embossed on envelopes. The oblique transverse bands on the upper jaws are peculiar to this individual drum.

Very few *warup*, so far as my knowledge goes, have animals carved in relief upon them on the upper surface of the middle line. One had a lizard; this I obtained at Tud. The other was in Mr. Savage's collection (fig. 15), and had a ray, along the back of which were holes evidently for the insertion of cassowary feathers; this is naturally in low relief. In the Museum of the London Missionary Society there is a *warup* from Saibai with a *Periophthalmus* on the median line at the open end; this little fish is readily recognizable from the prominent eyes and elbowed pectoral fins.

(2). The *buruburu* (fig. 17) is a more cylindrical drum, with but a slight central constriction; unlike the *warup*, a handle is invariably present. The tympanum resembles that of the latter, but the opposite end is simply circular. The average length is about 950 mm.

The handle is plain or ornamented with straight or angled lines constituting a very simple pattern. At the tympanic end there is usually a band design which resembles that met with on the corresponding portion of the *warup*. In a Cambridge specimen (o. III. 86, 71), a trefoil design is cut (fig. 17, c, and Pl. I., fig. 13). Greater variation occurs at the opposite extremity, one type has two ensaddling bands, each of which ends in three

lanceolate leaves (fig. 17, the central drum is not quite typical in this respect). I have a sketch in my notebook of another drum, in which the three leaves appear as if they were being transformed into a grotesque face; a less modified stage is seen in fig. 17, c. Finally a broad band occasionally encircles the open end of the drum; this may be divided by a zigzag line into triangular spaces which may be painted alternately red and white, or black, red, yellow, and white, as in the Dresden example (6400), fig. 17, b. In a *buruburu* I obtained at Yam, but which was said to have been made in Mowatta, the band is quite narrow, and consists of black

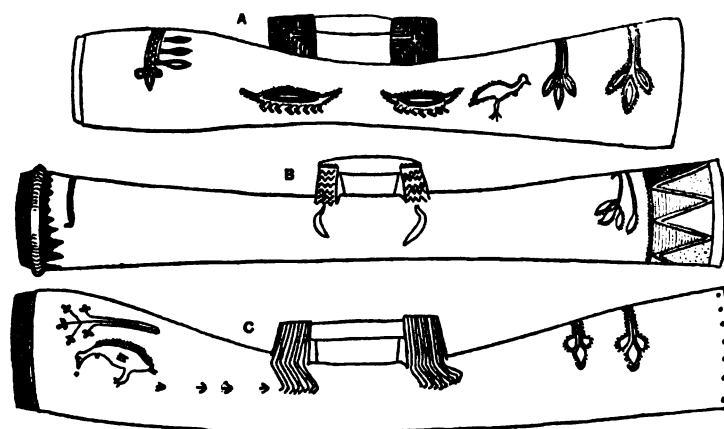


FIG. 17.—Sketches of three *buruburu*.

- a. Formerly in the possession of the Rev E. B. Savage.
- b. Dresden (6400). 940 mm. long.
- c. Cambridge Museum (o. III. 86. 71). Drawn to scale; 950 mm. long.

diamonds on a white ground, and there are two additions which I take to be conventional eyes. In this drum (which I gave to the British Museum) the handle is placed very close to the non-tympanic end. Occasionally a cassowary is engraved on each side of one of these drums.

2. *Dugong Harpoons*.—The dugong harpoon, *wap* (Pl. iv., fig. 54) is the most characteristic implement of Torres Straits, and it may have been invented by the islanders. It usually has a length of 4 m. 25 cm. to 5 m. (14 to 15 feet); one end is cut in a characteristic manner and usually is perforated with a long slit, and decorated with cassowary feathers, ovulum

[6*]

shells, and seed rattles, &c. The other end is swollen, and has a hole bored into its end for the insertion of the dart, *kwoiorro* or *kwiuro* (fig. 53, Pl. iv.) The methods of hunting the dugong are described in the Journ. Anth. Inst. xix., p. 350.

Most of the harpoons that I have seen have a band-like decoration round the neck; and usually associated with this are a couple of loops (Pl. iv., figs. 57, 62, 64). When I first saw the two elaborately carved dugong harpoons in Tud, one of which is represented in Pl. iv., fig. 64, the idea at once struck me that possibly this ornament represented a lashing, and the two loops indicated the ends of the string which were tucked under the binding. In the other harpoon in Tud the loops were replaced by triangles. The decoration (Pl. iv., fig. 62) is simplified on a harpoon in the British Museum. In a *kab wap*, or miniature harpoon used in dancing from Mer, there is a broad, slightly raised band round the neck, which is ornamented with cross-hatching and chevrons, while the loops are replaced by ends (Pl. iv., fig. 55). Lastly, the pattern may be reduced to a few encircling lines (Pl. iv., fig. 54), or even these may be absent.

I feel some diffidence in putting forward the hypothesis that this ornamental band represents a lashing, as there is no direct evidence in support of it. I am not in a position to say whether in former times the head may not have been made separately from the shaft, in which case they would have to be fastened together, or whether harpoons, as at present constructed, may not have a greater tendency to break at the neck than elsewhere, and consequently the lashing would be made at this spot. Since my return home I have seen many analogous instances of "skeuomorphic" ornamentation, as my friend Dr. Colley March has termed it.*

There is another ornament on the *wap* which, for a long time, remained an enigma to me. On every harpoon I came across there were a pair of divergent oval marks at the end of the butt, and on its upper surface. This orientation could be determined by the position of the shells and rattles which are occasionally employed in the decoration of these implements.

* Cf. "The Meaning of Ornament," Trans. Lancashire and Cheshire Antiquarian Society, 1888, p. 9.

When at Mer I obtained an old worn butt-end of a dugong harpoon, which was said to have been a *maid wap*, or "sorcery harpoon," and the name of *omaiter* was given with it. As a matter of fact, when I bought it it was being used for beating roasted bananas, but that would not necessarily preclude its having been formerly used in sorcery after it had become useless as a fishing implement. I was informed that *lukup*, or medicine, was put in the hole for the dart; then, hiding in a dark spot, the man who employed it would hit the person he wanted to injure in the ribs. Large eyes, jaws with teeth, and nostrils can be made out in this specimen (Pl. iv., fig. 56). The figure No. 3, pl. 345 in the "Album" is very sketchy.

In the small dance-harpoon in my possession which I have just referred to, a pair of eyes and nostrils are also present at the large end, but there is no mouth (Pl. iv., fig. 55).

A British Museum specimen (Pl. iv., figs. 57, 62, 63) is drawn on pl. 326, No. 5, of the "Album," the nostrils, eyes, and gill-slits are clearly seen.

It is unnecessary to adduce more evidence in favour of the view that the terminal dorsal markings on the club-shaped end of all harpoons are intended to represent nostrils which alone have persisted after the disappearance of the other features. What animal was intended to be represented is very doubtful; naturally one would imagine a dugong's head to be most appropriate, and at the same time coinciding with the savage idea of sympathetic magic; but the shape of the head, and the presence of a slit-like mouth beset with numerous teeth, negative this interpretation. I have no suggestion to offer, but would merely point out that the word *omaiter* may be partly derived from a dog, *omai*; but, on the other hand, the nostrils are not very unlike those of the dugong.

Mr. R. Bruce, of Mer, has given to the Glasgow Museum (89, 67, al) what was said to be a *maid wap*. In side view it shows a dentiferous mouth, long, narrow eye, and two gill-slits. With regard to the latter I may here mention that curved lines, reduplicating the angle of the mouth, are often to be met with in Papuan ornamentation. In some cases, as in undoubted fish, they are certainly intended for gill-slits; in others—for example, in crocodiles—whatever they are intended for, they certainly are not gill-slits.

In the latter cases they may merely be the expression of that tendency to reduplicate the last motive or design which appears to be characteristic of the decorative mind; on the other hand, it may be another example of a transference of features or attributes which often occurs in the art of savages. On the upper surface of this harpoon a frog (probably *Hyla coerulea*) and a centipede (*Scolopendra*) are cut (Pl. iv., figs. 58, 59). The latter may have sympathetic connection with the reputed magic use of this implement. I do not know the significance of two scrolls in the under surface; they may possibly be suggestions of the limbs (fig. 60). There is a very similar harpoon (Pl. iv., fig. 61) in the British Museum (c. c. 3283) which was brought from Torres Straits by Dr. Macfarlane.

3. *Arrows*.—This district is the head-quarters, so to speak, of the use of the bow and arrow in the British Protectorate. Bows and arrows have been obtained at Somerset, Cape York, but it has never been stated whether they were bought from Australian natives or from some of the Torres Straits islanders who are always to be found there. If the bow was employed by the Queensland natives its use was certainly extremely limited, and was directly due to the influence of their Papuan visitors. All the arrows used in Torres Straits came from the mainland of New Guinea. So far as I can gather the bow extends to about Cape Possession on the other side of the Papuan Gulf. It is not employed by the Melanesian immigrants (Motu, &c.), nor can I find that it is used by the hill tribes (Koiari, &c.).

None of the arrows in British New Guinea are feathered, and the end of the shaft is cut square. Among the Toaripi (Motumotu, &c.) there are, I believe, but two types of arrows (p. 134), whereas in this district there are several.

The following is an attempt at a classification of arrows from this district. They are divisible into three main groups which, respectively, have wooden, bamboo, or bone points.

(1). *Arrows with Wooden Points*.—These consist of a reed shaft with cylindrical gently tapering head of hard wood, which is generally blackened. The shaft is of the same type, as I shall describe in detail, for the bone-tipped class. They average in length from about 1445 to 1525 mm. (4 ft.

9 in. to 5 ft.); the head averages 435 mm. in length. They are known by the name of *kaigob* in the western islands. Maino of Tud called them *Wigilkau kaigob*.

I obtained one variety of this group in Torres Straits, the wood of which readily splinters, and I was informed that before use in fighting, the combatants split the point with a thin shell, so that splinters might become detached when in the enemy's body. Maino called them *bop*, and said they were made by the Wogaterri men.

Another variety was called *bisi kepp* in Mer as the red head was said to be made of sago-palm wood; these were either plain or with heads carved in a particular manner. At Waboda, in the delta of the Fly River, it is called *siremasepate* according to Mr. Chalmers.

There are a large number of arrows with heads carved in a simple but varied manner. A common form is for the delicate head to abruptly expand into a tapering conical point; the head may be barbed with the barbs on one, or two sides, or all round; sometimes a collar is carved on the head. I was informed that the necks of the conical points, &c., were nicked before using, in order that they might remain within the body of the enemy. The shaft is either blackened all over, or more or less of the bare rind may be left. They average in length from about 1385 to 1485 mm. (4 ft. 6½ in. to 4 ft. 10½ in.); the head averages 380 to 510 mm. (15–20 in.).

The Daudai name for these is *susuome*, and in the Western islands *baulilaig*, or *baulilug*; one with very conical head was called *bok*.

All the above have the junction of the head with the shaft very neatly and closely bound round with a thin lashing, which is covered over with gum.

The last division of wooden point arrows are small, slender weapons, with plain or carved (barbed, &c.) heads; they have uncoloured reed shafts, but the fastening is of thin plated cane. These arrows come from the Fly River.

Those I collected averaged in length from about 1090 to 1245 mm. (3 ft. 7 in. to 4 ft. 1 in.), the head being about 280–405 mm. (11–16 in.).

Similar ones in the Cambridge Museum from Waboda average from 1270–1435 mm. long; they are called, according to Mr. Chalmers, *teraiai*.

(2). *Arrows with Bamboo Points.*—These arrows are composed of three sections, a reed shaft, a wooden head, inserted into which is a bamboo point. Sometimes the point is a piece of narrow bamboo, split in half, and sharply pointed, or it may be a lanceolate piece of a large bamboo. The blade is sometimes notched at its base; these do not appear to be tally-marks. Rarely the bamboo point is inserted directly into the reed shaft. The wooden head is occasionally carved. The shaft is treated much in the same way as in the next group. The shaft and head are fastened with a neat gummed lashing, but the head and bamboo point have a stout string fastening, which is coated with gum.

One variety has plaited cane binders below, instead of the lower gummed lashing, and some of the points of this kind are of palm-wood, cut in imitation of bamboo. I have not met with this type in Torres Straits. It probably comes from the east of the Fly River.

The bamboo pointed arrows are used for shooting pigs or for warfare. I was told that when employed for the latter they were aimed at the abdomen of the enemy, in order to rip it open. These arrows average about 1525 to 1830 mm. (5 to 6 feet); the bamboo blades vary from about 335 to 560 mm. in length, and from 13.5 to 26 mm. in width. I have one of the greatest length combined with the least width.

The Daudai name for these is *uwere*; in the Straits they are called *sukkorri*, sometimes *buru sukkri*.

(3). *Arrows with Bone Points.*—These arrows also consist of three portions, a shaft of reed, a head of hard wood, and a bone point. They average in total length from about 1420 to 1580 mm. (4 ft. 8 in. to 5 ft. 2 in.); the shaft averages 940 to 1040 mm. (3 ft. 1 in. to 3 ft. 5 in.) in length, and the bone point, with its barb, 145 to 255 mm., the usual length being about 195 mm. ($7\frac{3}{4}$ in.). The junction of the shaft and head is strengthened with a strong string lashing. The bone tip is neatly fastened on to the head, and the junction is thickly coated with gum; a downwardly projecting barb is inserted; this is always a separate piece; and I have a specimen in which the wing claw of a cassowary is employed. These points are reputed to be poisoned by being stuck into decomposing human corpses,

but of this there is no corroborative evidence. MacGregor says (C. A. 1—1892, p. 48:—"There is nothing to lead one to suppose that these tribes prepare poisoned arrows, but the bone-tipped arrows often used probably contain septic germs lodged in the bone."*) At all events, the Torres Straits natives always take the greatest care not to get pricked by the points of these arrows.

This class can be further subdivided into those with plain and those with carved heads.

(A). *Plain Heads*.—The wooden head may be cylindrical, slightly tapering at each end; often it is painted with a broad, central black band, and occasionally this is ornamented with simple, encircling carved patterns. In others the head is more swollen in the centre, and flattened in the same plane as the barb. It may be plain or decorated, with a bead near its lower end; sometimes there is a little carving on one side.

The head is made of various kinds of wood, occasionally palm-wood, or a pale wood, most usually of a hard red wood, which is often coloured black; occasionally the head and its lashing are whitened. The shaft of the first variety is usually blackened all over.

It appears to be characteristic of the second variety that the shaft is only partially blackened. Usually the whole of the upper and the uppermost portion of the second internode is left uncoloured; sometimes the whole of the two upper internodes are so left, or the uppermost part of the first, or a central band only. As a rule, the rind has been scraped off those parts that are blackened, so that the colour may more readily adhere to the rougher and more porous surface.

The part which is of the natural colour may be left quite plain, or it may be decorated with groups of fine encircling lines, with occasionally scratched chevrons and other simple devices; sometimes the patterns are in zigzagged lines. I have given one very interesting example to the Cambridge Museum (o. III. 94. 35, m), in which the owner had decorated the lower

* Cf. Rev. Dr. R. H. Codrington, "The Melanesians," pp. 306–312; and Journ. Anth. Inst., xix., 1890, p. 215, for an account of the so-called poisoned arrows of the Melanesian Archipelago.

third of the first and practically the whole of the second internode by removing eight narrow longitudinal strips of the rind. The bands thus formed show black upon the yellow ground of the rest of the shaft; a line was scratched round the shaft in the upper internode to prevent the strips from going too far. The principle of this style of decoration is very characteristic of arrows from the Santa Cruz and Solomon Islands;* but here it has not assumed the artistic excellence displayed on some arrows from the Solomon Islands. Simple patterns formed by paring the rind of the shaft do, however, occur in the district.

(B). *Carved Heads*.—The heads of these arrows are carved in a characteristic and effective manner, the raised surfaces being blackened, and lime is rubbed into the intaglio portions. The shafts are usually blackened, or they may be decorated in the manner just described.

These arrows fall into four series (α , β , γ , δ); they are collectively termed *iana* in Daudai:—

(a). *Dugong-harpoon Arrow*.—The carving consists of two series of barbs, the upper of which varies from about 150 to 200 mm. in length, and contains about twelve to twenty, or more, rows of short barbs, which gradually increase in size from above downwards. The second series has usually only two rows of barbs, which are very much larger than the last of the upper series, in some examples the lowermost row may have a length of 90 to 100 mm. Below the latter there is a bead, and often between this and another bead lower down is a gently-swollen portion which is usually carved in simple patterns. These arrows, generally, have lime rubbed over them, but when properly prepared the barbs stand out black; occasionally red ochre is used instead of the lime.

The name I have adopted above was given to me in Torres Straits, presumably from a resemblance of the carving to the plumed end of a dugong harpoon (Pl. iv., fig. 54). They called it *putil* in the west, and *potil* in the east, the Miriam word *pot* signifies a finger or toe-nail, or bird's claw; this makes it the claw-arrow.

* Cf. H. Balfour, "On the Evolution of a Characteristic Pattern on the Shafts of Arrows from the Solomon Islands."—Journ. Anthropol. Inst., xvii., 1888, p. 328.

(β). *Man Arrow*.—These arrows represent a man (fig. 18); sometimes they are carved out of a thin piece of wood, but usually they are of larger diameter than the other carved arrows; good specimens vary from 25 to 35 mm. in the antero-posterior diameter of the man's head. In the western islands these arrows are called *parulaig*, and *opop* in the eastern—both terms mean "face."

The head of the man is usually surmounted by a few barbs similar to those of the upper series of the *putil*. The crown of the head may be cut square or bevelled, or rarely it gradually tapers to the stem bearing the barbs. The type of face is very characteristic, being greatly elongated, and usually with but a slight indication of a nose; the nostrils are M-shaped. A mouth is always present, and almost invariably a beard, occasionally there is moustache; whiskers, too, are usually indicated; and very rarely, as in figure 18, B, the nose ornament is represented. The high forehead is bounded above and at the sides by a band which marks the commencement of the scalp; very rarely the forehead is omitted altogether, as in a specimen (o. III. 94. 35, κ) in the Cambridge Museum. At the back of the head the hair is suggested by innumerable combinations of straight lines, zigzags, chevrons, diamonds, &c. No two are alike, the ornamentation commences about the level of the eyes, the crown being invariably plain.

The face and hair are separated from one another at the sides, and deeply undercut, so that, in the better carved arrows, they form two thin concavo-convex plates, with a narrow shaft passing up between them. In the smaller arrows the face and hair are separated by more or less deep grooves.

On the neck there is a prominent projection, sometimes very large, which represents the thyroid cartilage, "Adam's apple," (or, as the Torres



FIG. 18.

Sketch, drawn to scale, of two man-arrows, collected by the author in Torres Straits. Cambridge Museum (o. III. 94. 35 H-I.). One-third natural size.

Straits natives call it, *waiwai lid*, *waiwi ridö*, or Mango stone), occasionally a similar protuberance is carved at the back of the neck. The arms are always carved as if bent, with the hands immediately below the Adam's apple. The back of the shoulder is represented by a small ornamented area, but there is no definite shoulder-mark (*koinai*, *koima* of Torres Straits). I suspect that the ornamented area at the back of the shoulders is intended to indicate the surface modulations caused by the shoulder-blades. I have seen arrows in which no distinction is made between the shoulders and the hands. The hands are usually indicated by two or three transverse (rarely longitudinal) lines.

The chest is usually distinguished from the abdomen, the elbows marking its lower limit laterally; the sternum is marked by a decided keel, or by a row of tubercles. The dorsal vertebræ are also indicated by a well-marked line, or row of tubercles which are more prominent than those of the lumbar region when the latter are represented. The abdomen is transversely divided lines, between which are dots or other simple designs; very occasionally these run in a vertical direction. In a very few instances a navel is represented. Below the waist a double line usually indicates a belt from which a fore-and-aft flat elevation projects slightly. The significance of the two prominences is not clear to me; possibly the one in front may be intended to indicate the genitals, and the one behind the bunch of leaves or feathers which is so frequently worn by these peoples. In one instance the latter is absent; and the large triangle in front clearly represents the triangular shell pubic shield (*lorda*, *alida*, of Torres Straits, *vedere ere* of the mainland), which is the only armour used in war; perhaps this is intended in all cases.

The legs are rarely of a uniform thickness, the thighs and ankles being usually very broad, and the knee very narrow. The front part of the legs is always straight, and the knees are very prominent. The area between the legs in front is filled up with a simple design; and the diamond-shaped or lenticular area behind, which is formed by the narrowing of the legs at the knees, is filled up in various ways. The only arrow I have seen with feet represented is in the Oxford Museum (1632). A single border below finishes up the whole design. In the better carved arrows the undercut

portions between the face and the hair are painted red, and the barbs may also be reddened.

The foregoing description applies, in general terms, to the majority of this class of arrows, but no two are alike; and although there are numerous cases of degeneration, the human element never becomes obliterated. Sometimes only the head is carved, and the rest of the body may be entirely omitted, or represented by a simple, apparently meaningless, design. Some arrows exist in which the head, arms, and chest are alone represented, or even the head and legs may occur without the arms and body. There is a specimen in the British Museum which has a face on both sides of the head, as in a specimen (o. III. 94. 35, κ) I gave to the Cambridge Museum; in this also the prominent knees are duplicated lower down.

Dr. Uhle* describes three carved arrows in the Dresden Museum, two of which belong to this kind. He says they are "identical," but, having had an opportunity of examining them, I find they exhibit the usual variability in design; and one of them (No. 6404; fig. 1, 1a of Uhle) has a variation, which, as far as I know, is unique, since both arms arise from the left side of the body, and the hands are joined on the right side, instead of their arising from the back, and the hands meeting in front. A man-arrow is sketched in the "Album," pl. 267, No. 7.

(γ). *Crocodile Arrow and its Derivatives.*—This class of arrow forms a very interesting series, as it becomes greatly modified. At one end of the series we have an easily recognisable crocodile; at the other we have a lizard, or a well-marked snake; and possibly even this may degenerate into the simplest of patterns. It is known in the Straits as *kodal* or *kadal*, or as *kodalu parulaig*.

(a). *The Crocodile and its Degenerate Forms.*—In front of the main design there are usually a few barbs, much as in the "man-arrow," but these barbs may be considerably increased in number in the more degenerate type, or even absent altogether.

* "Ueber Pfeile aus der Torresstrasse."—Internat. Arch. f. Ethnogr., i., 1888, p. 173.

It is desirable to first describe a typical crocodile-arrow; and it will be necessary to call attention to certain well-marked divisions of the total representation: these are the snout, the head and neck (from the eyes, inclusive, to the fore-limbs), the fore-limbs, the trunk, the hind-limbs, and the tail. In these arrows, too, a simple band-pattern generally terminates the whole design.

(i). The snout is plain; above, at the anterior extremity, are two elevations, which are meant for the prominent valvular nostrils of the crocodile. Occasionally one is placed behind the other (fig. 19, A), instead of their being side by side, or even but one may be present. Laterally the jaws and teeth are usually characteristically rendered. In one arrow in the Cambridge Museum (fig. 19, B), the teeth of the upper jaw on one side have, by an easy transition, been transformed into a zigzag line. The underside of the snout and head is ornamented with lines and dots which may have a longitudinal or transverse arrangement, or both may occur as in fig. 19, B.

(ii). The head and neck, like the snout, are plain above, except for an occasional representation of scales on the neck (fig. 19, C), and the ventral ornamentation is a continuation of that of the underside of the snout. The eye is triangular, with the apex behind, rarely oval, as in fig. 19, C; a band-pattern, usually a zigzag, which is always distinguishable from the ventral ornamentation, extends from the eye to the forelimb.

(iii). The region of the forelimb has generally the greatest thickness of the whole arrow. The limbs often arise from an ornamented band (fig. 19, A), which represents the prominent scutes in this region of the real animal. The forelimbs first project backwardly, and then run forwards towards the middle ventral line. The toes are usually indicated by transverse lines.

(iv). The trunk has usually a row of chevrons or diamonds running along the dorsal and ventral median lines; the lateral ornamentation usually consists of transverse lines, separated by rows of spots; sometimes these run longitudinally.

(v). The hind-limbs may be separated dorsally by a triangular area (fig. 19, A), or by a row of tubercles (fig. 19, E). The limbs invariably bend

forwards, and then backwards. The enclosed angle contains a row of spots or rarely a plain ridge.

(vi). Typically the tail is ornamented with three, occasionally two, dorsal rows of tubercles. The median is a continuation of the median series, or the triangular area above noted; sometimes the median row is directly continuous with the central series on the back of the trunk. The lateral start from the insertion of the hind limb (fig. 19, A, D, E). Beneath there is a large quadrangular plate, ornamented with concentric lines, and the sides of which often extend up to dorso-lateral angle of the tail.

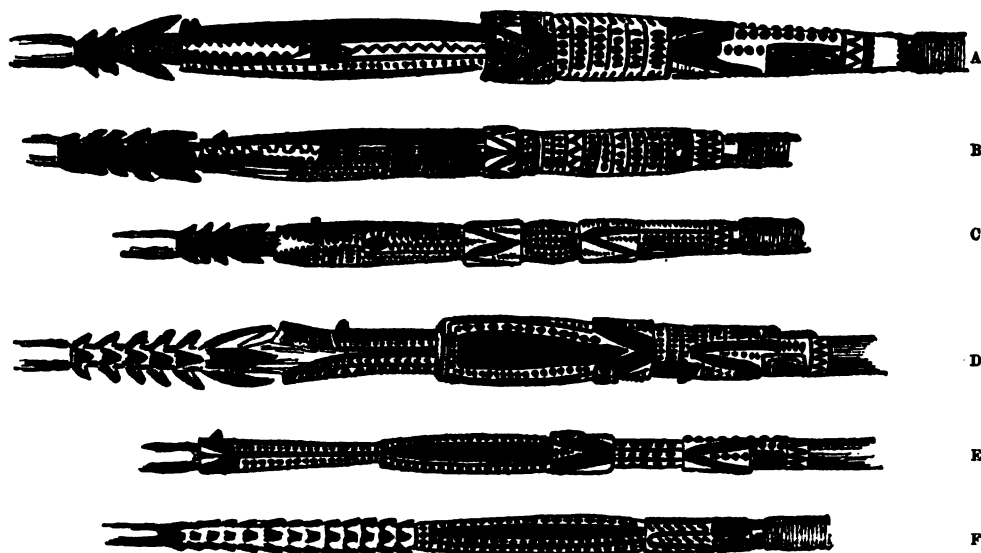


FIG. 19.—Sketches, drawn to scale of a series of crocodile-arrows and derivatives, collected by the author in Torres Straits. Cambridge Museum (o. III. 94. 35 A-F). One-third natural size.

On comparing a number of crocodile-arrows with the animal itself, one is struck with the numerous realistic details which have survived the decorative treatment of the design. It must be remembered that one is dealing with a work of decorative art, and not an attempt at realistic carving. In one arrow several anatomical characteristics of the crocodile will be suggestively rendered; in a second other details will be more accurately carved; but in the great majority of arrows belonging to this

series, variation has occurred to such an extent that the crocodile becomes almost unrecognisable as such.

In fig. 19 I have drawn half a dozen specimens which I have given to the Cambridge Museum; equally characteristic examples will be found in many other museums.

A very typical crocodile arrow is to be seen in fig. 19, A; the chief variation in this is the placing of one nostril behind the other.

In fig. 19, B, the nostrils are side by side, and the teeth of the upper jaw are represented by a zigzag line. The hind limbs and the tail are entirely absent.

Fig. 19, C, is important in several respects. The nostril is single, the mouth is partially closed; but the teeth have not, as yet, entirely disappeared from the hinder closed moiety. The eye is oval—a rare feature—and the dorsal scales of the neck are represented: this is also rare. The fore-limbs have been converted into a raised zigzag band, which encircles the arrow. The hind limbs do the same, except that the pattern is interrupted in the median dorsal line by a double row of tubercles, which represent the prominent dorsal scutes of this region in the living animal. The thigh is carved with a curved upper border and a straight lower border.

There is rather a gap in the series between fig. 19, C and D; but it is easy to see that the hinder part of the mouth is closed, and the teeth of both jaws are represented by different patterns; the front part of the mouth is widely open, but edentulous. The nostril is single. The eye has become enormously enlarged, and constitutes what I propose to term an eye-panel; it extends backwardly to the fore-limb. The plain upper surface of the head and neck has become much reduced, owing to the encroachment of a double row of spots on each side. The artist mistook the upper for the lower surface when he carved the fore limbs, for it will be seen that the toes are above and the dorsal scutes are placed below. Another point of interest is the replacing of the central row of caudal scutes by a plain ridge; so far as I am aware this is unique.

Fig. 19, E, is a type of a large number of arrows. The front open part of the mouth is quite small, and the surfaces of the jaws are scored by

oblique lines. The median dorsal plain band of the snout is no wider than the lateral bands which indicate the closed hinder part of the mouth. In the gape of the mouth an elongated triangle is very generally present; this is doubtless intended to represent a tongue, sometimes it is notched. The eye-panels are elongated and narrow, and the dorsal median band of the head and neck extremely reduced. The rest of the body in this arrow calls for no special mention. Sometimes eyes are carved on the dorsal surface of the gaping end of the upper jaw.

In the last arrow (fig. 19, F) of the series which I figure, the front part of the mouth has disappeared; but the hinder part of the head is much the same as in the last arrow. The fore-limbs and body are absent. The hind-limbs are narrow, but retain their characteristic forward bend; the dorsal caudal scutes are replaced by numerous parallel transverse lines.

An arrow in the Dresden Museum (6407), belonging to this group, has been figured by Dr. Uhle (*l. c.* p. 175, fig. 2). He thus describes it: "In a fourth the human representation, so to speak, is entirely excluded; the body of the arrow-head, that is the swelling, is almost solely geometrically decorated. A zigzag band (engraved) terminates above, and (in relief) below these patterns, and perhaps are to be recognised as remnants (arms and legs?) of the human figure." I regret that my ingenious colleague has generalised from a single example. The arrow in question may be sufficiently accurately described as being very similar to fig. 19, E, if the eye-panel section and the fore-limb were absent, and their place taken by the elongated body. I believe the nostril is absent, and the usual concentric cloacal plate is replaced by a zigzag. The upper incised zigzag, alluded to by Dr. Uhle, is the oblique lines on the tip of the snout, and the lower zigzag, in relief, is the hind-limbs of the crocodile. Dr. Uhle's figure is drawn with the median dorsal line facing the reader. I have drawn attention to this suggestion of Dr. Uhle's merely as a warning of the danger there is in these studies of misinterpretation from the lack of a sufficiently large series of specimens.

It would be impossible to refer to all the modifications of this class of arrow which are to be found in museums. The few I have just described indicate the general drift of the changes which occur, and will enable

anyone to interpret the carving on the majority of carved arrows from this district. Two features, however, are worthy of special allusion, the one is the remarkable retention of the projecting nostril, which may often be found as a slight prominence in very degraded arrows; and the other is the still greater persistence of the tail and hindquarters of the crocodile, I suspect that the striking decorative effect of the concentrically marked cloacal plate has led not only to the retention of that part, but also to that of the neighbouring organs.

(b). *The Snake Variety*.—We now pass on to a small group in which the open front part of the mouth of such an arrow as fig. 19, E, has suggested a complete head, and so eyes are added (fig. 20); the rest of the snout, the



FIG. 20.—Snake-arrow, collected by the author in Torres Straits. Cambridge Museum (o. III. 94. 35, e).
One-third natural size.

head and fore limbs are omitted; the body is much elongated, but the hind legs and tail are usually quite normal, or subject to merely minor variations; the patterns may run transversely as in the figure, or longitudinally. Such a carving irresistibly calls to mind a snake; the natives themselves told me it was a snake, calling it *elma gudulaig*.

The tail and hindquarters, however, proclaim the crocodilian original. In this group of arrows we have a very interesting example of the transition from one form into another; but hitherto I have not seen a snake-arrow which has lost all trace of its saurian ancestry.

(c). *The Lizard Variety*.—I have also given to the Cambridge Museum (o. III. 94, 35, L) an arrow which pretty closely resembles fig. 19, E, except that the hind-limbs are elongated and slender, and the tail is not crocodilian. The body is depressed and lozenge-shaped in section. In other words the body, hind legs, and tail are lacertilian in character. In this, and in one or two other arrows known to me, the crocodile has been confounded with a lizard.

(8). *Arrows with Simple Patterns.*—The last class, and it is a small one, of bone-tipped arrows with carved heads, has, so far as I know, no particular name given to it by the natives. Barbs may be absent, or present to a greater or less extent. The design generally consists of longitudinal lines separated by the usual bars, diamonds, chevrons, zigzags, &c.; sometimes two zigzags run down one interspace, but in this case they are not uniformly kept symmetrical to each other.

As there is no trace in these arrows of any vestigial structure, one may regard them either as extreme forms of a degraded crocodile's or snake's body, or merely as arrows decorated with a simple design.

4. *Canoes.*—Among the several canoes which still remained in Mabuiag, at the time of my visit to that island in October, 1888, only two had any pretence to decoration in the old style; a sketch of the bow of one of them is seen in fig. 21. In all of them there was a peculiar incised decoration a short distance from the bow, usually near the termination of the weather-board. This received the same name, *koimai*, as the cicatrice formerly carved on the shoulders of the men. The first one I sketched (fig. 21) consisted of concentric triangles; feeling sure that this mark had some significance, I sketched those of various canoes, some of which I here reproduce (fig. 22); at last one gave the clue. It is evident that we are here dealing with a series of degenerate representations of the human face. The small triangles shown in fig. 21 and 22, D, run all along the canoes below the split bamboos which cover the line of junction between the gunwale and the body of the canoe.

Two designs which greatly puzzled me were incised on the sides of the bow of a canoe (fig. 21). They were cut and painted by the owner, whereas the incised patterns just described were cut by the Dudi makers of

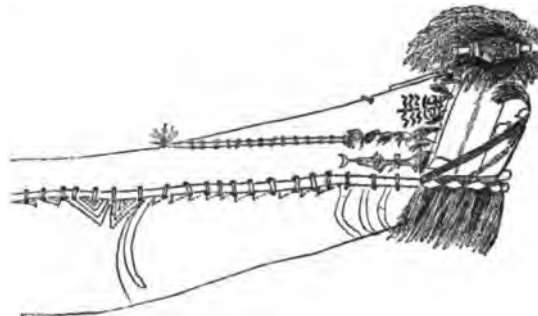


FIG. 21.—Bow of a canoe named *ausum*, sketched at Mabuiag by the author.

the canoes. I was informed that the zigzag lines represented the bones of a fish; and the design beside them was a cross-section of a fish's body,

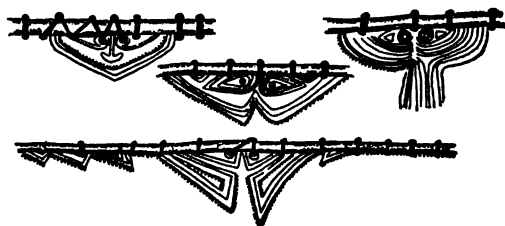


FIG. 22.

Koimai designs on canoes, sketched at Mabuiag by the author. These were incised by the makers of the canoes in Dudi.

the diamond probably being the section of the vertebral column, and the four encircling marks indicating the muscles as seen in section. The lower figure was also a representation of the bones of a fish, the central diamond being the end view of a vertebra, and the oblong beside it being the side view of another vertebra. I must confess that I do not feel quite

satisfied as to the correctness of my information, but on the other hand I cannot offer a more plausible interpretation, and my informant had no object in misleading me. It is quite obvious that the designs were not casual; they must have had some significance.

VI. Textiles.

I shall have another opportunity of describing those arts and crafts of the people of this district, which lack of space precludes me from mentioning here. I must, however, make a few remarks on the industry of plaiting mats, baskets, and belts. It should be remembered that probably the whole of the decorative art we have hitherto studied is the work of the men, whereas the textiles are solely woman's work.

The mats, as a rule, are perfectly plain, the plaiting being of the simplest possible description. Some mats, *tiro*, from Daudai are made of strips of pandanus leaf fastened together; they are very similar to those from the Massim District, but are never scored with patterns, and they have vandyked ends.

Some of the baskets from Torres Straits are also quite plain. One variety which is known as *li* in the Muralug-Moa dialect, and *ienna* or *ianna* in that of Badu-Mabuiag (pl. 336, No. 8, "Album") has a zigzag pattern

on its outer surfaces, which is formed by the insertion into the plait of extra bands of the same split pandanus leaves, of which the rest of the basket is made; the narrow intervals between these are painted, usually alternately red and black.

In a similar manner the belts, *wakau*, and the crossed shoulder-belts (*naga*, Muralug-Moa; *kamadi*, Badu-Mabuiag) of the western tribe of the Straits are ornamented with chevrons, zigzags, and diamonds in a lighter coloured leaf (often the bright yellow skin of an orchid) on a ground-work of plaited bast. Red worsted or other European material is now often added to make these articles still more "flash."*

At Mowatta, and in Daudai generally, twists and plaits of alternate blackened bast and pale yellow leaf are applied on to a simply plaited bast-belt, *bata*; the added portion is produced beyond the lower edge of the belt as a broad fringe. The patterns may be broad, oblique bands; transverse



FIG. 23.—Rubbing of a belt collected by D'Albertis at Katau (Mowatta) in 1876. Rome (2813).
Each group of two L-shaped spaces is painted alternately red and black. One-third natural size.

zigzags; numerous oblique bands with a double longitudinal chevron at intervals; two or three very broad bands alternating with an annular rhomboid containing a smaller one; a succession of oblique rhomboidal loops arising from each border, each series pointing in the opposite direction, thus forming a "key-pattern"; or a true meander pattern running obliquely (fig. 23). The intervals of the foundation material are usually painted red, sometimes alternately red and black, or red and yellow. These belts, which are worn by the men when dancing or fighting, average in length from about 1225 to 1500 mm.

Of similar construction is the band with which the women of Daudai bind and carry home their firewood. This is also called *bata*. Two specimens, recently sent by Mr. Chalmers, are decorated with an oblique

* Cf. "Album," pl. 341, No. 4.

meander pattern with very long (about 400 mm.) loops. The *bata* are over 4 metres in length ($13\frac{1}{2}$ feet). One of these is in the Cambridge Museum.

The band of the scanty Daudai petticoats, *wapa*, is differently made, but the broad hind portion (fig. 24) is decorated in a similar way as the belts;

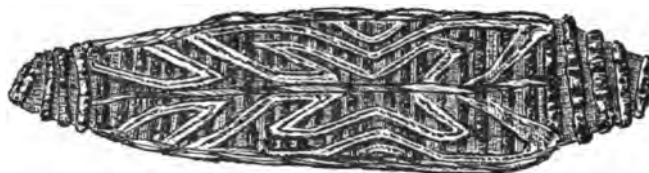


FIG. 24.—Worked-up rubbing of the hind-band of a petticoat from Daudai. In possession of author. One-third natural size.

but, so far as I am aware, the patterns are not quite the same, nor have I seen a meander pattern on them. The spaces between the applied pattern are usually coloured red. The patterns usually consist of some modification of the one figured; the central longitudinal band may be absent, in which case the design is more symmetrical, or the ornamentation may consist of a design which is practically the upper half only of fig. 24, but thrown into bolder loops. I have described this petticoat under the name of *maiwas* on p. 467 of the Journ. Anthropol. Institute, xix., 1890. I appear to have misunderstood my informants when later on the same page I speak of the *wapa* as being a "full petticoat worn by more inland tribes."

Finally, I would like to point out that in this district the ornamentation of plaited objects is usually accomplished by appliqué work; and, so far as my experience goes, this does not occur elsewhere in the British Protectorate.

Only a certain class of pattern can be employed when the method of ornamentation consists in applying bands to a plaited belt, and it is interesting to notice that the meander pattern is current in Daudai. At present we cannot say whether it has been arrived at independently or whether it is a far-travelled design. I would, however, like to suggest that the former is to my mind the more probable view, and that some possible stages in its evolution still occur as patterns on belts. If the oblique bands, instead of each ending abruptly, were returned, a distinct approach would

be made to the oblique rhomboidal loops which do occur, and the bending over of the tips of these results in a meander pattern.

The only other recorded (and, indeed, the sole one known to me) example of a meander design from this district forms a band pattern round the forehead of a turtle-shell dance-mask from Mabuiag in the Dresden Museum (6396). It is figured on Taf. II. of Meyer's "*Masken von Neu Guinea*," &c., and is referred to on pp. 3 and 9 of that beautifully illustrated memoir. When noticing this memoir in "*Nature*," vol. XLII., 1890, p. 269, I said that the meander pattern did not occur on other objects from this district, and concluded, contrary to Dr. Meyer, that it was directly copied from some introduced object.

At that time I had not seen the meander pattern on Daudai belts, and now I can show that it exists in the district. We may regard this design as being indigenous; but it is very strange that it has not more often been transferred from textiles to other materials.

VII. Summary.

The prevalence of straight and angled lines, and the rarity of doubly curved (sigmoid) lines in patterns, is very apparent in this district. Bowed or semicircular lines and circles are, however, common; the former I regard as rounded zigzags or triangles, as, for example, in the patterns to the extreme left of fig. 15, Pl. II. It is worthy of note that these almost exclusively occur on bamboo objects, the smooth skin and rounded surface of which would insensibly lead the hand to pass from angles to curves, especially when these were of small size, it being much easier to keep large triangles angular than it is to prevent small zigzags from becoming rounded. Lines with a double curve (I am now confining myself to patterns and designs) are extremely rare. Sometimes, as for example, in fig. 14, Pl. II., bowed lines will be drawn on each side of a line, when they occur opposite one another a kind of circular pattern will be produced, and when they occur alternately a waved pattern will result; this latter never appears to have been seized upon or isolated as an agreeable pattern; and when it does occur it is evident that the waved appearance is accidental;

it is incidental to certain casual conditions, but never appears to be predetermined.

A careful study of the angular designs clearly shows that the fundamental pattern is a zigzag inscribed between two parallel lines, this being repeated in bands. If every alternate zigzag is filled up, a pattern is formed of rows of triangles, the so-called tooth pattern. On the pipes this is accomplished by shading the triangles with transverse or oblique lines, and in wooden objects by leaving the alternate triangles solid instead of excavated; the former are usually emphasised by filling up the latter with lime. If the bases of the marked triangles coincide in contiguous bands, diamonds will result; and from an examination of the material at my disposal, I have no doubt that such has been the origin of the diamond pattern in this locality.

In the numerous sketches I have made of plaited objects, such as armlets, belts, bags, and the like, I have found that I could indicate the texture only by employing chevron markings, and these regularly repeated in rows, form zigzags. My friend Mr. Edge Partington has had recourse to the same expedient in the representations of plaited objects in his invaluable and copiously illustrated "Album." The ornamentation of plaited objects by "appliqué" naturally takes the form of chevrons, zigzags, &c. I am inclined to believe that this may account for the very frequent occurrence of these simple patterns in this district, for the natives would be prone to ornament other objects with those designs which were most frequently before their eyes. It would practically end in the same result whether the artists endeavoured to represent plaiting on a wooden or shell object, or whether he merely copied the designs which, so to speak, evolve themselves in plaited work. I do not wish to carry this argument too far, for all chevrons and zigzags are certainly not due to this cause.

The designs may show out black on a dark ground or *vice versa*, and colours are often introduced to emphasise a pattern. These often have an alternate arrangement, black, white, and red are the most frequent pigments; occasionally yellow is employed, and more rarely a kind of dark slaty blue. Of course I am here referring to the native colours; at the present day

pigments obtained from the white man are utilised, more especially red lead and a bright blue.

The predominance and variety of animal forms is also noteworthy. Marine animals are not unnaturally most often depicted by the islanders, owing to their perforced maritime habits; these are often indicated with admirable precision. The zoomorphic totems of these people also encourage the practice of the representation of animals.

It is somewhat remarkable that no case has come under my notice in which the delineation of animals has led to their being worked up into ornamental designs, or resulted in their degradation into conventional patterns. In the majority of instances the animals are placed more or less in a haphazard manner, or they are symmetrically disposed with regard to a middle line, as in the totem animals to which I have previously referred at some length. In this latter case a pair of the same animals only are represented. Animals, or portions of them, are never drawn in a linear series, nor are they grouped so as to represent scenes. The nearest approach to this are the sea-eagle with a fish, and the man with a turtle (figs. 38, 45, Pl. III.).

The two instances of landscapes are interesting; but I have not come across a single example of a celestial body being represented in the decorative art of these people. Possibly the flag-like addition to the crest of the hill in fig. 10 may indicate a cloud, but on the other hand it may really have nothing to do with the main design.

Vegetable forms are very rarely drawn; half a dozen coconut palms and a number of lines which represent the "bush" occur in fig. 10. In the other landscape on the Oxford pipe, the trees are very poorly drawn. What are probably leaves are frequently cut in the cylindrical drums from the mainland of New Guinea (fig. 17).

We see that the animals are always represented individually, and are not utilized for the purpose of making patterns, or of telling a story, or for conveying information. Pictography, or picture-writing, which appears to be so obvious a means for recording events, is entirely unknown in this district, and so far as I am aware in the whole of the British Territory.

These facts afford some indication of the plane of mental and æsthetic evolution at which these people have arrived. It must be remembered that the natives of this district, more especially perhaps in the islands, were essentially a democratic people; there were no chiefs in the ordinary acceptance of that term, and consequently there was no political organization. Social matters seem to have been mainly regulated by palavers, in which all the adult men could take a part. So far as I could gather though sorcery was a secret art and could only be transmitted by initiates, yet the sorcery men had not yet organized themselves into a powerful religious body, as is usually the case. It may be that this lack of organization might also find expression in their art, and might be one reason for the non-cohesion of their animal delineations.

DECORATIVE ART OF THE FLY RIVER DISTRICT.

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So far as our limited knowledge of the Ethnography of the Fly River District will permit us to generalize, it seems that we may regard the whole of this geographical area as belonging to one ethnological region.

The Fly River rises in the Victor Emanuel Range at the border of the German and British Territories, about lat. 5° S., and empties itself by a wide delta into the Papuan Gulf, after a course of more than 500 miles.

For the sake of convenience I propose to divide the Fly River itself into four districts; but I do not, however, wish to suggest that these subdivisions have any ethnological value:—

(1). **The Delta**, *i. e.* from the mouth of the river to the village of Tagota (lat. 8° 24' S., long. 142°, 30' E.), a distance of about 86 miles from the S.E. end of Kiwai Island.

(2). **The Lower River**, from Tagota to Everill Junction, *i. e.* where the Strickland River joins the Fly River (lat. 7° 30' S., long. 141° 21' E.), 243 miles from its mouth.

(3). **The Middle River**, from Everill Junction to D'Albertis Junction. The Junction of the Fly and Alice Rivers (Snake Point of D'Albertis), lat.

[8*]

6° 11' 6" S., and about nine miles east of the boundary between British and Netherlands New Guinea, 460 miles from mouth.

(4). **The Upper River**, north of D'Albertis Junction.

Our knowledge of the Fly River is confined to the accounts published by the famous Italian traveller, Signor L. M. D'Albertis, and the present energetic and distinguished Administrator of British New Guinea, Sir Wm. Mac Gregor.

The foregoing positions are taken from the "Map of the Fly River—British New Guinea, from Surveys and Explorations made by the Government of British New Guinea, January, 1890," and published in C. A. 105—1890.

I. The Delta of the Fly River.

The islands of the Delta, and the adjacent country are all low-lying, and often more or less submerged. Where the land is suitable for occupation this region is occupied by settled agricultural tribes.

Kiwai Island.—Kiwai is by far the most important island at the mouth of the Fly; it is about 37 miles long, and averages about $2\frac{1}{2}$ miles broad. It is perfectly flat, probably no part of it is 6 feet above high-water mark; considerable areas are something below the mark of high spring-tides. The whole island is covered by dense scrub and forest. The population is about 5,000; their intelligence is proved by the fact that they cultivate 36 kinds of bananas, 20 kinds of yams, 10 kinds of sweet potatoes, etc. They use 11 kinds of fibres, and drain their gardens by ditches 4 yards apart. An account of the people will be found in D'Albertis' "New Guinea," II. pp. 18–21, 43, 51, and in Mac Gregor's Reports of December 9, 1889 (*cf.* Bibliography, C. A. 105–1890, pp. 36–43). "Neither men nor women tattoo . . . They do not seem to practise any other form of mutilation [than nose and ear piercing], except that a few have scars on the back. (D'Albertis, II. p. 19, says: 'Many have tattoo marks upon or behind the shoulders, much resembling those of the Australians.') . . . They do some carving on drums, etc., which they call *titi*, and this

therefore becomes their word for 'writing.' The men are quite naked. The women, down to the smallest little girl, wear a dress made of the different kinds of fibre, and generally coloured yellow, reddish-brown, and brownish-black. The yellow dye is procured from the root of a plant which seems to be a kind of turmeric; the reddish colour is got from a red clay brought from Dudi (the mainland on the right bank of the river); and the black colour is given to the fibre by burying it in mud for about a week." A fairly complete reprint of MacGregor's researches on the island is given in the *Journal of the Anthropological Institute*, *xxi.* 1891, pp. 75-77, and a very abbreviated account in J. P. Thomson's new book, pp. 117-121.

Bevan gives (1888, p. 27; 1890, p. 258) a sensational account of the habits of the Kiwai natives. MacGregor criticises this in detail.

The following is a combination of the several descriptions given by D'Albertis of the Kiwai men. They are in general thin, with slender limbs, but do not appear to be wanting in muscular strength. Stature moderate, some being tall, well made, and not very dark; bodies completely destitute of hair. The prevailing type is a narrow, retreating forehead, with prominent brows, pointed head, hollow temples, prominent cheek bones; nose rather large, strongly marked, aquiline; small eyes, irides of very dark chestnut colour, with a bluish tint towards the periphery, the eyeball often deeply bloodshot and yellowish; lips small, and not turned back, dark purple in colour; teeth strong and white; hair of head either worn short, or if long, parted into ringlets, and smeared with earth; it is evenly distributed over the scalp; almost all have thick, though not long beards. In one place we read (p. 50) that the skin is rather lighter than at Mowatta. Many approach the Hebrew type. A few are of a special type. "Their features remind the observer of those of a camel." [I have observed this type in Saibai Island, A. C. H.] Hair, generally speaking, short and woolly, sometimes long, and plastered in little curls with oil and mud, as in Torres Straits. The perforated lobe of the ear is usually drawn out two or three inches, and often reaches to the shoulder. MacGregor, as is his wont, enumerates the diseases or maladies the people suffer from.

Until very recently the only ornamented objects I was acquainted with,

which were undoubtedly of Kiwai origin, were three or four drums. These are more or less cylindrical in shape, decreasing slightly in diameter to the neck; the non-tympanic end is cut into an open mouth, with slightly divergent jaws. This end alone is decorated. There is no handle. The tympanum is fastened on to the drum by means of a band. The average length of a drum is about 900 mm. ($35\frac{1}{2}$ in.), and its average diameter about 110 mm. ($4\frac{1}{2}$ in.). Its native name is *gama*.

The ornamentation consists of bold, deep carving, the hollows or lines of which generally are alternately painted red and white, the ground colour of the drum being very dark wood, usually blackened. There can be but little doubt that the drums were primitively carved in imitation of the head of some animal, probably a crocodile. In a drum in the Glasgow Museum (89–67 cm) the jaws (Pl. v. figs. 70, 71) are cut with that peculiar waved line, which is so characteristic of the crocodile's snout. Behind the jaws, in the neck, there usually is a band pattern, which repeats the design on the jaws. In a carelessly carved drum in the Cambridge Museum, and which was given to me by Mr. Savage (o. III. 94, 36), the ornamentation takes the form of scrolls. I also give illustrations (Pl. v. figs. 66, 67, and 72, 73) of the head-ends of two other Kiwai drums, which I drew when they were in the possession of my host, the Rev. E. B. Savage, then resident in Mer, Murray Island, and who obtained them at Sumai. These two drums, especially the one which was painted in red, in addition to the black and white, are well carved. The Cambridge Museum has recently acquired another typical *gama* (870 mm. long), which was collected at Waboda by Mr. Chalmers.

The series available is not sufficiently extensive for certainty, but it seems pretty evident that all these designs may be regarded as conventional and degenerate representations of the head of the crocodile.

Very similar to these, both in form and in style of decoration (Pl. v. fig. 69), is the drum (about 797 mm., $31\frac{3}{4}$ in.) figured on p. 274, vol. i. of Jukes' "Voyage of the Fly." It was obtained at Bebea, "Pigville," a village, as Mac Gregor shows (C. A. 1. 1892, p. 53), on the Bebea-oromo, the eastern mouth of the Bamu river. "The Bebea men are of good physique, and in appearance closely resemble the Kiwai and Mawatta men. They

understand many words of the Kiwai language" (C. A. 1-1893, p. 36). This specimen is now in the British Museum (Christy Coll., 8833), and is sketched on Pl. 332, No. 2, of the "Album," and figured on p. 228, vol. ii. of Ratzel's "Völkerkunde." There is another similar drum, but with a slight variant of the design, in the British Museum, of which the locality is unrecorded.

The cylindrical drum without jaws appears to extend to the islands of the delta. I suspect the *buruburu*, as it is called (fig. 17, B), in the Dresden Museum (6400) is from this region.

The same kind of bamboo tobacco-pipe is used in Kiwai as that which obtains in Daudai and the Straits. Here it is called *waduru*, and the bowl *aturupo*. MacGregor says:—"At Kiwai the figures carved on the *wadura* [as he spells it] are scratched into the bamboo."

There is in the Glasgow Museum (89, 67, du) a remarkable heavy wooden *aturupo* of quadrangular form; it is 184 mm. ($7\frac{1}{4}$ in.) long, 57 mm. square above, and 31 mm. below; the lower surface is provided with a central perforated plug, which fits into the hole, *sia*, of the *waduru*; each side is deeply carved with various designs of chevrons, zigzags, concentric oblongs, &c. Quite recently the British Museum has acquired a similar but smaller bowl (cc. 94, 120) from the mouth of the Fly River; two sides are decorated with zigzags, and two with what I take to be a reminiscence of a nose and mouth.

In the Glasgow Museum there is a pipe (89-67 dx) from "Murray Island," or Mer; as the Eastern Islanders have commercial relations with the people of Kiwai, and more particularly with those of Parama, it is most probable that it was imported into Mer. Two-thirds of the surface of the pipe from the blind end is ornamented; the designs have the same general character as those on pipes from Torres Straits; but there is more filling-up by line-shading than is usual, and some of the triangles and diamonds are shaded with concentric lines. The zigzagged etching is decidedly coarse. Another pipe in the same museum (87, 30 a, no locality) is decorated all over in a somewhat similar manner, and the concentric idea is even more fully carried out.

A pipe in the British Museum with two styles of ornamentation deserves

special mention. The geometrical pattern of concentric lines is drawn in rather coarse zigzagged lines, whereas the rest of the ornamentation is in fine twin-punctate lines, quite in the style of the Islanders. The pipe was given to me by the Rev. E. B. Savage, to whom it was given by the Murray Island teacher who was then stationed at Parama or Parem (Bampton Island, long. 143° 20' E. lat. 9° S.). I am inclined to believe that the geometrical band was the work of a native of Parama, and that the scattered figures were etched by the Murray Islander. They were, undoubtedly, the work of two artists.

There is a pipe without a locality in the Liverpool Museum (5010 M) which is engraved in a remarkable manner. The whole pipe is completely covered with four repetitions of the same design, which consists of a human face, with two arms, and a crocodile (fig. 25). The spaces between the figures are filled up with concentric lozenges and angled lines. This portion of the design and the style of its execution so closely resemble the band pattern on the last pipe that there can be no doubt that both pipes come from the same district. This pipe may safely be relegated to the mouth of the Fly River, and possibly to Parama. It is true that a geometrical design similar in motive and execution to this has just been described from a pipe said to come from Murray Island; but, so far as my experience goes, the Eastern Islanders (Erub, Mer, &c.) never represent the crocodile, that reptile not being an inhabitant of these islands. The crocodile is, however, common in Daudai, and is very frequently represented by the

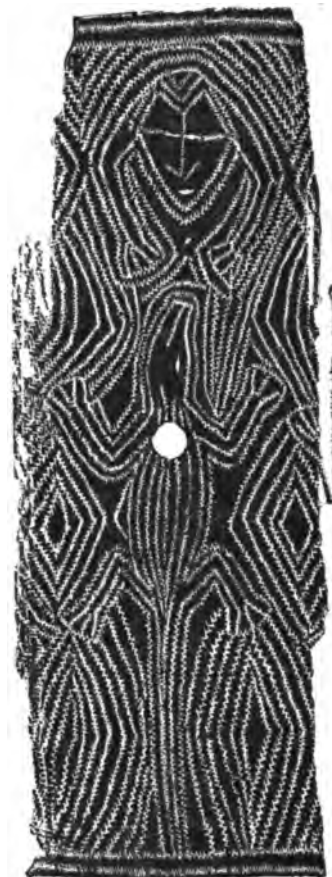


FIG. 25.

Rubbing of part of the decoration of a bamboo tobacco-pipe in the Liverpool Museum (5010. M), probably from the mouth of the Fly River. One-third natural size. In the original the lines show dark on a light ground.

natives of that district. The hole for the insertion of the bowl is much more central in this pipe than is usually the case.

In the British Museum (+ 3402, "Fly River") there is a pipe* with a simple coarse design. It is especially interesting from the fact that the blind end is produced into two jaws, which recall the crocodile jaws of the drums, *gama*, from Kiwai (Pl. v., figs. 66-73). It is very probable that this pipe comes from that island.

The Dresden Museum possesses a pipe (4489) also from the Fly River which has a very simple design; in this the polished rind is scraped off the greater portion of the pipe, leaving only a few panels, which are very simply ornamented with wide zigzag lines (fig. 1, c). I have a pipe, which I obtained at Mer, in which a similar panel of rind is left intact on each side of the hole for the bowl; but these are decorated with a peculiar pattern in dotted lines (fig. 2, A).

At Daumori, the "Long Island" of D'Albertis, seventeen miles above Kiwai Island,† Mac Gregor purchased a coloured shield or sign, which was suspended on the front wall of a house; it was rudely carved out of soft wood; it seems to be made for the prow of a canoe, and represents a grotesque human face. Although the men do not tattoo they inscribe certain figures on the skin in raised cicatrix (C. A., 105, 1890, p. 44).

The Rev. J. Chalmers has very recently sent over from the mouth of the Fly River some oval wooden slabs, on which are carved conventionalized human faces, associated with simple patterns; some he describes as "*gope-gope*, charms hung in new house for good-luck . . . *gope*, house charm . . . *gope*, figure-head of canoe, gives good passage, and is thought a wonderful charm." The largest of these, 560-953 mm. long (22 - 37½ in.) are, undoubtedly, the same as that referred to by Mac Gregor; the smallest (370 mm.), now in the British Museum, is, probably, a house charm only, and not a canoe figure-head as well. I suspect that all of them are in reality bull-roarer derivatives; they probably are akin to analogous objects from Freshwater Bay, p. 102, Pl. vi., figs. 98-103. Mr. Chalmers, in some MS. notes which are not yet printed, states that the bull-roarer,

* Cf. "Album," pl. 318, No. 2.

† Cf. Thomson, pp. 122-124.

burumamaramu, is shown to the initiated young men about the yam season ; these bull-roarers are decorated with incised or carved designs.

With regard to the figures carved on the tobacco-pipes Mac Gregor says :—"The idea seems to be to produce them in low relief, which is done by scratching and painting all parts of the bamboo except the portion of its original surface left to represent the designs of the artist."

The Daumori, who are an agricultural people of friendly disposition, number about 300. The single village of the island consists of six houses, each of which is about 150 feet in length.

Odagositia.—Mac Gregor gives* an interesting account of the village of Odagositia, which he visited on December 21, 1889.† It is 51 miles from the mouth (lat. $8^{\circ} 28' 20''$, long. $143^{\circ} 0' 30''$ E.), opposite the islands of Sumogi and Maouettiserro. The village consists of two or three small houses, and one enormous one about 520 ft. in length, and more than 30 ft. wide inside. The interior "was a perfect model of cleanliness, order, and regularity. The entrance was ornamented by two carved and painted boards about 12 or 15 inches broad, and 10 or 12 feet high, put up as door-posts, bearing figures of the human foot, hand, arm, &c. . . . On the shoulder, over the deltoid muscle, generally the left, there is on the men a tribal crest, put in by a raised cicatrix, about a third to half an inch in width. In addition, some of them had on the breast, above the mamma, a second crest in cicatrix M, about 2 inches high and $2\frac{1}{2}$ inches broad. Some have only one of these over one breast, but others have two on each side. These are not so common as the first one, which is also carved into some of the posts of the house. Quite a different crest was represented, also in raised cicatrix, on some men in Odagositia from Namira."

Odagositia is apparently the village which was looted by Mr. Chester, on board the "Ellangowan," on December 18, 1875 (D'Albertis, II., pp. 31–41), and from which was obtained the human skulls with a face-mask of wax, and decorated with red seeds and white shells, one of which is figured by D'Albertis (*l. c.* p. 39). Near Canoe Island, D'Albertis saw two

* C. A., 105–1890, p. 45.

† Cf. Thomson, pp. 124–126.

men who had "a deep tattoo mark on the shoulder, somewhat resembling a serpent (p. 42).

Tagota.—Here also the men scarify themselves. Mac Gregor says, "Over and below the shoulder-joint the Tagota crest is displayed in raised cicatrix. It is worn by all the adult males, as far as I could see. It is about four inches broad and six long." Tagota is about fifty-three miles above Kiwai Island. Sir William Mac Gregor describes* the unprovoked attack by the natives on his party; but friendly relations were finally established.

D'Albertis remarks of the natives near Attack Island (II., p. 237), that they "appear to be of a mixed race," as he observed many different types; they were slightly built, and of low stature; the colour of the skin was rather dark, but there were exceptions. In other respects they resembled the Kiwai natives. Near Canoe Island the predominating colour was rather light, though there were not wanting individuals of very dark hue, none were really black, and not one offered any resemblance to the genuine negro type. He observed, in general, a physiognomy which strongly recalled the Arab type. They "appear to be very much alike" [D'Albertis evidently implies this of the population of the Fly Delta], "but I do not consider that they represent a pure type of any race, at the same time they afford a very marked type of a variety occasioned by the commingling of two distinct races. I think they have more affinity with the eastern than with the north-western races of New Guinea."

II. The Lower Region of the Fly River.

Mac Gregor informs us that, "between Tagota and Everill Junction there is a great gap in native settlement; but south of the river there is a large tribe somewhere in the bush between these two points. The tribe at Everill Junction is a settled community" (C. A. 105, 1890, p. 63).

Just below Ellangowan Island, D'Albertis noticed some natives, the colour of whose skin was very light" (*l. c.* II., p. 60); his other references to this region will be found on pp. 31, 32, and 62.

* C. A., 105, 1890, p. 48; *cf.* Thomson, pp. 127-129.

III. The Middle Region of the Fly River.

"There seem to be four tribes [in this district], all more or less of a wandering disposition" (Mac Gregor).

About forty-two miles from Everill Junction, Mac Gregor* saw a native, about twenty-five years of age, who "had a well-formed crescent cicatrix done in his skin, about three inches long, in the line of the breast-bone, with the nipple on each side on the concave edge near its centre." He was about 5 feet 3 inches in height; "his hair was plaited with fibre into a great number of small tails, which were taken over the vertex, and hung down the back to below the shoulder-blades. The lobes of the ears were pierced, and contained rings of cassowary quills. In the septum of the nose he had a piece of bamboo three inches long and three quarters of an inch in diameter." He wore a necklace of *Coix lachryma* seeds, and cross belts to match, and a belt of plaited yellow and black fibre; below this was a string, to which was suspended a tuft of grass behind, and a marine shell in front. His canoe and implements are also described. A few miles higher up, probably at D'Albertis' "Attack Point," "on a large palm-tree there was a representation of the human figure by a native artist, done in colours, red clay and charcoal. This was the only drawing of the human form observed during the tour. It was about three feet in length, and has some claim to originality, at least. The artist had been more successful with a crocodile, and succeeded so well as to deprive his production of much interest."

Villaggio dei cocchi is the MS. name given by D'Albertis to a village in which he collected (?) a couple of pigs, and a large number of interesting objects (II., pp. 131-137).

The Villaggio dei cocchi was apparently the first village reached by Mac Gregor, on January 7, 1890; it is situated about 380 miles from the mouth of the river. In his description of the natives here, and of their reception of him, Sir William gives (C. A. 105-1890, pp. 52-54) one of his vivid accounts of Papuan ethnography, which is recast in an abbreviated

* C. A., 105, 1890, p. 51; also cf. Thomson, p. 135, who also reproduces Mac Gregor's sketches of tree-carvings, and other marks.

form by Thomson, pp. 137–141. Their war-gear and war-paint is described, “they wore fewer ornaments of the *Coix lachryma*, and many more of the teeth of small animals; the men wore a small marine shell, or instead of the shell a small nutshell, a little larger than a walnut, and fastened by a string which went round the hips, and was suspended to the belt.” The canoes, like the others of the Fly River, are without outrigger. “Some of them were chewing betel-nut, using it without lime, but they can, and do, make lime from a large river mussel . . . There were a few insignificant gardens; the people, however, were all in fair physical condition. They seem to live chiefly by fishing, hunting, and on forest produce breadfruit, and sago. They are not settled agriculturalists. They use plaited baskets, net bags, buckets made of the cover of the flowering branches of palms, and they make fishing-nets of different forms and sizes. For procuring tools for working wood they are in a most unhappy position; they are too far from the white man to procure iron, and there is no stone of any kind in their country. Hence they value very highly the most worthless remnant of a stone adze, and with these they will not part on any consideration. Of course, under such circumstances, it will be readily understood how much they would desire to procure a steel tomahawk. But I repeatedly failed to obtain a piece of pubic shell, or an old head-dress, for a tomahawk. These ornaments are apparently held in reverence by them, probably as heirlooms. They cannot be purchased. This was either not known, or was disregarded by D’Albertis;* but in this respect D’Albertis was, probably, no worse than the Royal Geographical Society’s [of Australasia] expedition on the Strickland.”† For further details the reader is referred to Mac Gregor’s original Report. I have quoted the latter portion in full, in order to show how difficult it often is to obtain certain objects, more especially articles for adornment, even from savages. Thomson, however, figures, on p. 138, a feather head-dress, which purports to come from this locality.

Seven of the skulls (II., pl. facing p. 131) annexed by D’Albertis, and now in the Museum in Florence, have designs carved on the frontal bone.

* See Blue Book, C. 3617, 1883, pp. 7–27.

† See Lindt’s “Picturesque New Guinea,” p. 178.

It is impossible to say what is the object of these carvings or what they are intended to represent. "Almost all these skulls bore traces of violent death, *i. e.* fractures produced by sharp weapons." He figures (p. 134) the embalmed head of a man, from which the skull had been removed.

The paddles were of a shape novel to him. "They are ten or twelve feet long, light and round, and ending in a disc often coloured with black, white, and red." These are figured in vol. i., p. 297, figs. 1-4. The blade of the finest of these is represented in Pl. v., fig. 78.

The most remarkable objects he obtained were some stone clubs (termed *baratu* by Maino, chief of Mowatta) with perforated ornamental tops wonderfully carved in hard stone; nothing like them is known from anywhere. As fig. 2 of the original woodcut illustrating these objects is indistinct, owing to the tassels of seeds (*Coix lachryma*) and feathers, I have given a sketch (Pl. v., fig. 77) I made of it in the Museum in Rome, where the other specimens also are. Fig. 4 also scarcely does justice to the twisted and interlacing design of the original. These carvings are all coloured.

"Two large but very roughly made drums" are mentioned by D'Albertis. He gives five drums on p. 269 (vol. ii.); figs. 2, 3, and 4 are stated to come from the Fly River. Unfortunately D'Albertis was very careless about labelling his specimens, and although I have studied his book most carefully, and have examined the actual specimens in Italy, it is often impossible to say where particular objects were obtained. He evidently did not consider it important to discriminate between localities on the Fly River. I feel pretty confident that fig 3 at all events belongs to the middle division of the river and possibly to this village; figs. 2 and 4 (Pl. v., figs. 79 and 80-81) must remain unlocated for the present. The same uncertainty holds good with regard to the tobacco-pipes. There are some nine or so decorated pipes from the "Fly River" in the Museum in Rome, all of which, from the style and technique of the ornamentation, I believe to come from this district. Before I describe the drums and pipes just alluded to I will conclude my enumeration of the tree carvings recorded by D'Albertis and Mac Gregor, assigning to each, as far as possible, its precise position on the river.

So far as I can gather it was a little higher up the river that D'Albertis

saw a hieroglyph on a tree. "The tree on which I remarked this sign being very white, and the sign itself very black, it was apparent to every one passing along the river. I had it copied as exactly as possible" (II., p. 66).

On the following day (June 5, 1876) D'Albertis visited an old village. In the centre was a cleared space, reddened posts stood in the middle, which "seemed to have been used to support a trophy." "On several of the surrounding trees, hieroglyphic signs, depicting animals and roughly drawn human figures had been carved and painted red, white, black, and yellow. A crocodile in the act of climbing a tree, and painted black, was rather well executed. I could not resist the temptation of bringing away with me the piece of bark on which a human face was carved, and which I contrived to strip from the tree successfully" (II., p. 69). This is now in the Museum in Rome (No. 2020), and I made a drawing of it (Pl. v., fig. 76). It is a remarkable design, the continual breaking out into spirals being very marked. The subdued colouring is very unlike the harsh colours so generally employed in New Guinea, the colours employed in this design are mentioned in the explanation of the plate.

It was somewhere in this neighbourhood that Mac Gregor saw some tree carvings. "The principal figure was of the form of a St. Andrew's cross, about two feet long, cut through the bark of the tree and then filled in with lime. It seemed to be a year or two old. The other figures were meaningless to us." This was about 400 miles up the river.

There are a couple of drums in the Museum in Rome (Nos. 2574 and 2575), which are respectively 1000 mm. and 1800 mm. in length. The decoration of the former (Pl. v., fig. 83) agrees so closely in style with the carving on the bark (Pl. v., fig. 76) that there is no doubt about its coming from the same district. It is of the *buruburu* type, but with the raised handle-bands which characterize the Toaripi drums (p. 128). The second drum is that figured by D'Albertis (II., p. 269), it is more skilfully carved than the preceding. The design is apparently intended to represent leaves of the croton or dracæna; these plants are cultivated by the natives of the Fly for decorative purposes in their dances, and the latter are always accompanied with drum beating. The engraving fairly well indicates the

design, but the concentric circle of the figure in D'Albertis is really a spiral (Pl. v., fig. 82). The ornamentation of these two drums is confined to the non-tympanic end, it occupies the upper angle on each side which is bounded by a curved line passing from two-thirds of the distance between the upper rim and the handle to median ventral point of the rim, the designs of the two sides are fairly symmetrical to one another.

Several pipes in the Museum in Rome (2520–2530) are labelled by D'Albertis "Fly River."

They are carved in low relief, the abraded portion being coloured brown, so that the pattern shows up light on a dark ground.

In some the pattern is confined, or mainly so, to the bowl end, and these I believe came from the locality now under consideration. Fig. 84, Pl. v., is from a rubbing of the best of these (Nos. 2529, 2530, and 2531, are very similar). In fig. 75, Pl. v. (2524) there is also decoration at the open end of the pipe. (No. 2525 is almost precisely similar to this.) In No. 2522 (Pl. v., fig. 74) the pattern is mainly at the open end, and in No. 2520 there is a central band of longitudinal areas with cross-hatching and terminal triangles as in the previous pipe. The last two pipes may not have come from the same locality as the others.

On June 6, 1876, D'Albertis looted a house of some skulls and other objects (ii., pp. 71–73), amongst the latter was a small coconut fastened on to a handle of light wood, painted in various patterns, in white, red, and yellow, a sort of cross predominating, and decorated with red and white beads. On some nuts a human head appears to be represented. "The hole takes the place of the mouth, the nose is artfully imitated with little bits of bamboo, ornamented with beads, and fastened on with a sort of gum or wax. In the same way the forehead and eyes are formed and ornamented, the outer covering of the nut at the back is used to represent hair."

Below D'Albertis Junction (Snake Point) D'Albertis decapitated the body of a young man; the specimen is in the Museum in Rome, and it is figured on p. 284 of vol. ii. of the Italian traveller's book. The mode of dressing the hair is the same as that which obtains higher up the river. The nose was pierced twice, one hole being above the other, and the teeth were perfectly black from betel chewing.

IV. The Upper Region of the Fly River.

At D'Albertis Junction (the Snake Point of D'Albertis, and re-named by Mac Gregor) the Alice River joins the Fly. Very little is known of the former.

Alice River.—Mac Gregor simply says: "There is a tribe on the lower reaches of the Alice River." D'Albertis (II. p. 123) found the men tall, with not very dark skin, and hair short. One was so light in colour he might easily have passed for a white man, bronzed by the sun. The man's insulting gestures ("turned his back and struck his thigh"), the pig traps, the use of clothes, their not being head-hunters, and the lighter coloured skin, are the arguments urged by the author in favour of his opinion that the interior is inhabited by the same race ("the yellow race") that dwells in the eastern part of New Guinea.

D'Albertis found two houses like those which appear to be characteristic of this district, and one 12 feet square up a tree, at a height of 50 feet from the ground. In this was the skeleton of a child wrapped in bark, and a cuirass or armour of rattan, which he figures on p. 126.

The Upper Fly River.—According to Mac Gregor, "There is only one tribe between D'Albertis Junction and Palmer Junction" (lat. 5° 55' S.).

D'Albertis gives a detailed description (II. pp. 85–89) of a rectangular house, raised 25 feet from the ground, which he discovered on June 16th, 1876. The house is very similar to the one subsequently described by Mac Gregor up the Palmer River. It contained several stone weapons, star-shaped, disc-like, and oval stone clubs, bows, arrows barbed with fish-bones, echidna spines (p. 88), "and some arrow-heads seemed to be made of silica" (p. 86). Garments of grass cloth, no human skulls, only two human jaw-bones, and a collar-bone, but great quantities of human hair. Necklaces of dogs' and crocodiles' teeth. Gourds for lime, spatulas. Water was contained in square-shaped vessels made of bark. Sago was preserved in sacks, or rolled in banana leaves. The pipes differ but slightly from those used in Kiwai Island.

At the highest point reached by D'Albertis (June 20, 1876, *ii.*, pp. 95–103), he found a house which, with its contents, resembled that just referred to. The interior of the house was divided into three compartments. "I observed some round logs of wood, probably the trunks of small trees, which bore spiral marks of fire. On examination I ascertained that with these the natives are accustomed to kindle their fires. A piece of rattan about 2 feet long, and split in two for about half-way its length, used like a rope round a drill, causes the wood to take fire by its friction." Some folded pieces of bark, artificially softened, and stuck full of birds' feathers, contained a kind of "vegetable cotton," which D'Albertis "had seen used in other places to kindle the fire by friction with wood." There were no human skulls, but odd human bones, more frequently the coccyx, were found preserved in bags, as well as animal heads, birds' claws, etc. Crocodiles' skulls were kept with care, and wrapped in large dry leaves. The women's garments were like those worn in the East; one end was shorter than the other. Two mummies, which D'Albertis collected (?), are described, and their skulls figured on p. 102.

Mac Gregor states (*C. A.* 105–1890, p. 56): "It was found possible to identify many places on D'Albertis' map as far as D'Albertis Junction; but beyond that the course given to the Fly by him so little resembles the river . . . that not one point on it can now be identified, and consequently his furthest distance cannot by us be determined; . . . it is quite plain that D'Albertis' steam launch never reached this island" (Macrossan Island, $2\frac{1}{2}$ miles S. of the 6th parallel, about 63 miles from D'Albertis Junction, and 523 miles from the mouth of the Fly).

Palmer River.—Apparently there is only one tribe on the Palmer River. Mac Gregor gives details (*l. c.* p. 59) of a remarkable pile dwelling 20 feet square,* in which was a central partition to divide the men from the women; each side had three sunk fireplaces. "Inside it were flints, to be used as knives; gum, for fixing the points on arrows; red clay, used as paint; bow of palm wood; arrow, $7\frac{1}{2}$ feet long, with palm wood point; fire-making stick of cork wood; rotten arm bagnet, used as a basket or pocket;

* *Cf.* Thomson, pp. 148, 149.

buckets made of the blossom cover of palms; cooking stones; bamboos for holding water; a smooth round stone for pounding and grinding paint clays; shelves and hooks for receiving articles were put up at several places; castaway women's petticoats; basalt stones, selected for the manufacture of stone adzes."

Higher up the river he met with a man with "hair plaited into long thin pigtails with fibre, which hung down his back. He carried a bow and some arrows, and had on his back a netted bag, in which was a dead wallaby; on the top of the bag stood a fine large orange-coloured dingo . . . In nothing did I observe any difference in these people from those seen elsewhere in the Possession, save that they were of a remarkably light bronze colour . . . Clearly there is a considerable native population there, and judging from the size of the garden, then in process of making, they are of more fixed habits than the tribes further south. They left on us the impression of being a quiet, inoffensive tribe . . . Their demeanour was clearly friendly, and not suspicious" (p. 61).

I can gather no information respecting the art of the upper part of the Fly or of the Alice and Palmer Rivers. D'Albertis (II. p. 97) found at the highest point reached by him (June 20, 1876) "a drum of coarse make. It is a piece of tree-trunk, one end being covered with iguana (monitor) skin, and the other terminating in two points, something like the mouth of some strange animal." "The pipes differ but slightly from those used in Kiwai Island, and at Moatta" (p. 87).

V. Summary of Decorative Art and Ethnology of the Fly River.

I have now given every reference I can find to native art on the Fly River, not omitting the marks carved on trees, or cut in the skin of the men, which are probably of a tribal or clan significance.*

A survey of the material I have at hand seems to indicate that the art of Parama differs but little from that of Daudai proper and of Torres

* Since this Memoir was sent to press, I have received a number of drawings of cicatricial marks on natives of the Fly River and neighbouring districts which were copied by my friend Mr. R. Bruce. I hope to publish these shortly.—*September*, 1894.

Straits. The same applies to Kiwai Island, except that the drums with jaws, *gama*, are quite distinct in form, and style and motive of decoration, from the *warup* of Daudai, but agree with the drum collected at "Pigville" (p. 70), on the Bebea River. In this connection it is interesting to recall a passage in Chalmers (1887, p. 67): "Vaimuru, I think, must be on the Aird River. The Vaimuruans first came from Urama, which is far away (possibly the Fly River) to the setting sun, where the spirits of the dead now go. Their pearl-shell comes in large quantities from Urama, and long, long ago tobacco came to them from there." The boldly cut designs, and the restriction of the decoration to the open or mouth end of the *gama*, recalls the *aopa* drum of the Toaripi.

The art of the Middle Region of the Fly River is certainly very distinct, and the leaf-like designs and free treatment of curved lines and spirals is quite unlike anything we have yet studied. The spirals we shall meet with in the Papuan Gulf District, but the free use of leaf-like figures is practically unique; suggestions of it do occur, as we have already seen, in some Daudai drums. The stone clubs (Pl. v., fig. 77), with lattice-like termination carved in hard stone, are the most remarkable and skilfully executed objects from this part of the world, and exhibit an unsurpassed technical skill in stone carving. It is probable that these *baratu* had an emblematic significance, and that they had a religious value apart from what must have been to their owners a very great intrinsic worth.

These considerations suggest that the natives in the interior of New Guinea cannot be a degraded people, but that they are probably as skilful as any other tribe. The rattan cuirass which D'Albertis brought away (II., p. 126) reminds one of the similar armour Dr. Finsch discovered in Angriffs Harbour, near Humboldt Bay, on the north coast of New Guinea, in German territory.* Future exploration will determine whether the natives of the interior near the upper reaches the Fly River have any relations with the natives of the northern coast of New Guinea.

On the other hand, there are in the Museum at Rome two wooden belts, which were collected from the "Fly River" by D'Albertis. The pattern

* Cf. *Samoafahrten*, p. 337, and *Ann. k. k. naturhist. Hofmuseums*, vi., 1891, Wien, p. 78; III., 1888, pl. xxiv., fig. 7.

carved on them is quite in the style of the belts from the Papuan Gulf District, but their rude workmanship would lead one to suppose that they are more of the nature of copies or derivatives than as being common indigenous objects. The design of the larger belt (2024) consists of three pairs of conventional human faces, in two of which the faces look towards one another, and in the central pair they look away from one another; the pairs of faces are widely separated from one another by simple patterns. This belt is about 110 mm. wide. The other belt (2023) is smaller, about 65 mm. wide, and its decoration is analogous to that of the former.

The technique, not the style, of the decoration of the bamboo pipes from the central Fly River district also points to an affinity with the Papuan Gulf natives. More than this it would, at present, be hazardous to venture, and I will conclude with MacGregor's opinion concerning the Fly River natives:—

"I have seen no evidence of the existence of a race in the interior distinct from the coast tribes. Those seen at the boundary between British and German New Guinea were of a light colour; but that may not signify much. The dialects of the lower tribes differ from those of the upper in, as far as we know, every word. Of the structure of the languages we know nothing, save that in all every word ends in a vowel. They live in settled communities on the lower part of the river, and consequently are agriculturists. They cannot, on account of the low, wet country, and the occurrence of floods, reside as settled communities, after passing Everill Junction, until they reach the hills of the upper reaches of the river. They all use the same arms, the bow and arrow. They suffer from the same diseases. They use, in the lower part of the river, only leaves and fire for cooking or roasting; in the upper reaches, where there are stones, they use those and leaves for the same purpose; but I do not believe there is a clay pot on the Fly River. The women are all clothed, only with local differences in the fashion of their petticoats. The men use the same sort of head-dress from Saguana to the German boundary, and the tattooing on their bodies, if it can be called so, is cicatricial. Necklaces and belts of the teeth of any animals procurable are used over the whole district. They have all the same large breed of orange-coloured dingo. They differ greatly in type and size, but not more so between Saguana and the German boundary than between Saguana and Daumori, the first sixty miles of the river. They are equally shy and timid, yet vivacious, excitable, and always doing very plucky things. Some light is thrown on their disposition by the fact that we went to the boundary and returned without firing a shot at, or to frighten, a native."—MAC GREGOR, C. 6323, 1891, pp. 113, 114; or C. A. 105,, 1890, p. 64.

VI. The Country from the Fly River to Cape Blackwood.

The country between the Fly River and the recently discovered Bamu River, the next river to the east, has been explored by Mac Gregor (C. A. 1, 1892, pp. 49-54). It is all covered by forest, but no cultivation was seen, the houses are small, and the language is allied to Kiwai. At Gauobur-arubi the verandah posts of the houses are carved in high relief into very long and highly grotesque caricatures of the human face. About thirty miles up the Bamu River is the large village of Sepota (p. 52), besides the usual ornaments the men wear head-dresses of cuscus skin and elaborate plaited girdles, with a fringe hanging down several inches all round. "They do not understand the Kiwai language, but their dialect is allied to that tongue. They are a fine, muscular healthy race of men, but not of large stature."

The Aworra is an affluent of the Bamu, and nearly 60 miles from the sea is a village of the same name. "In appearance, dress, arms, and ornaments, they resemble the Sepota tribe. They had no pigs, but plenty of dogs. In all the tribes between Morehead River and the Aworra, the bow is made of bamboo, and the string is of the same material, and fixed by knots on the end of the string through which the sharpened extremities of the bow are pushed. At Aworra the bow is sometimes made of palm wood [this was also noticed by Jukes, vol. 1., p. 277], sometimes of bamboo. The string is of bamboo, but it is fastened to the bow by fibre, so cleverly let into the end of the string, that the greater the strain on it the tighter becomes the fastening. They do not use such a strong or heavy bow as the coast tribes, and can, therefore, probably shoot better; for the coast bow is seldom well bent in shooting." The beheading knife and head-carrier are employed. As usual Mac Gregor notes their diseases. "They are clearly of Papuan blood, strong, bulky, but not large men . . . they said they did not use tobacco, they do not chew the betel-nut; nor so far as I saw is it eaten in that part of the country, although there are wild edible species in the forest . . . I saw only one fishing-net in the village."

The last unsurveyed portion of the coast of British New Guinea has at last been explored by Sir William MacGregor (C.A. 1, 1893, p. 37). Twelve miles east of the Bebea is the Gama River. The Sogeri and Daruba-Arubi tribes live here. "They did not know beads, iron, or looking-glasses; the men were all quite naked; they resembled Kiwai men in form, colour, and feature, and they understood many words of the Kiwai language" (p. 38).

About half-a-dozen miles further east is the large estuary of the Turama River. The people here "have the small head, large nose, and retreating forehead of the Fly estuary tribes. They all shave off the hair from the forehead. The men wear a plaited or bark belt round the waist, and from this depends a small apron of native cloth of the bark of the nettle or bread-fruit tree or the pubic shell" (p. 39). "On all these rivers the lower tribes were most careful to always define themselves as being *Tagara-arubi*, or *Tara-arubi*. In the Fly Estuary the word means 'old' or 'ancient.' These tribes apparently wished us to understand that they were people of descent, of settled habits and fixed abodes, in contradistinction to the bushmen, *Oberi*" (p. 41).

Half-a-dozen miles beyond the Turama River is the Omati River, and three or four miles further east is the first of the several mouths of the Kikori (Aird River); the central delta island is Ibibubari, the southern point of which is Cape Blackwood (lat. 7° 49' 24"; long. 144° 30'). "In personal appearance these people [the Paia tribe of the mainland] have strong resemblances to the tribes of the Fly Estuary, but they all shave a part of the forehead quite bare. . . . The women wear the same peculiar petticoat as the Fly Estuary women, but it is fastened to a broad belt of bark carved into elaborate designs. The men wore the bark carved broad belt, with the pubic shell or an apron of native cloth; but they also had a long apron behind, consisting generally of a handful of flowers, or of fibre from the young sago leaf" (p. 43).

At the Aird Hills the natives dress like the Paia, but "had short, thick cylinders in the septum of the nose, like the Toaripi tribes, ear-rings, cassowary plumes, wrist gauntlets, and belts of bark. They do not tattoo" (p. 43).

Bevan was the first to explore the delta of the Aird River, but beyond the map made by his surveyor he has given us very little information. Concerning the people and their arts and crafts he says nothing.

Mac Gregor points out that "the names about the Aird River have clear traces of the Eastern tongue. . . . The Mawatta people have developed the sailing powers of canoes in a most intelligent and surprising manner; they have their sea-going canoes now all schooner-rigged, with canvass sails. [This innovation is really due to the Torres Straits Islanders, from whom it was copied by the Mowatta men.—A. C. H.] In the Fly Estuary the canoes have very small outrigger at a great distance from the hull, and the rig of the canoe, with a sail made of mat supported by small rods and twine, is purely toyish; but east of Kiwai no sail of any kind whatever is used in the gulf, at all events up to Cape Blackwood. It is now becoming a common trade to build canoes on the Fly, which are sold to and rigged by Mawatta and Turehuri." I have previously shown, *Journ. Anthropol. Instit.*, xix., 1890, p. 341, that this is an old trade.

Unfortunately no ethnological specimens have come to Europe from the district extending from the mouth of the Fly River to the Toaripi country, *i. e.* from 143° 30' to 145° 30', except Jukes' Pigville spoil. From Mac Gregor's account it seems evident that Fly Delta and the Aird Delta, with the intermediate country constitute one ethnographical region, and with these must be classed the Daudai tribes of Mowatta and Turehuri. But, at present, there is no information concerning the decorative art of the numerous tribes that inhabit these swampy forest-lands. It will be very interesting to compare the carved bark belts worn about Cape Blackwood with those worn further east in the Gulf.

DECORATIVE ART OF THE PAPUAN GULF DISTRICT.

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I. General Description and Ethnography of the District.

Owing to the imperfect state of our knowledge respecting the country at the back of the Gulf of Papua, it is very difficult to speak with any feeling of certainty respecting its ethnography. For the present I think we are justified in regarding the coast region from the delta system of the Aird River* on the west to Cape Possession on the east (*i.e.* about long. 144° E. to lat. 8° 30' S., long. 146° 25' E.) as comprising one artistic province, which may conveniently be termed the Papuan Gulf District.

Only the coast and a few of the estuaries of this region are known and that imperfectly. Inland there are hills and mountains, but the neighbourhood of the coast is flat, alluvial land, often swampy, and for the most part

* My friend Mr. R. Bruce has just sent me a rubbing (fig. A) of part of a carved pattern, with a large scroll at each end, which ran along a canoe forty feet in length. These canoes have no outrigger, and vary from forty feet to six feet in length, and in width from one



A



B

foot to three feet. He made this rubbing, with considerable trouble, at Kaiburave, on the Kaimari river, near Bald Head, on Feb. 7, 1894.

Fig. B "was taken from a canoe about thirty feet in length. All the canoes at this part of New Guinea have no outriggers, and are carved from end to end. This is the face that finished the carving at one end. It was taken under great difficulty, as there were hundreds of men in these canoes, five or six deep around the steamer. While I was rubbing this the canoe was

ROYAL IRISH ACADEMY.—CUNNINGHAM MEMOIRS, NO. X.

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intersected by creeks and intricate estuarine channels. There is a rich vegetation of coconut, sago, and nipa palms, with patches of mangroves,

The population is numerous to the west, the people appear to approximate in character to those of the Fly River Delta, those in the centre more nearly resemble those of the region around Freshwater Bay, which we may take to be the focus of the district from our immediate point of view.

The Toaripi (or Elema, Ilema, &c.) are fine savages, virile and artistic, and it is a satisfaction to find that these people are under the charge of the genial and energetic "Tamate," who says of them:—

"Amongst all the various tribes I know in New Guinea, there is none to compare with the Elema, extending from Oiabu at Cape Possession to Orokolo in the west. It is the largest, occupies most country, and is most independent. To that tribe belong the Motumotuan, who live in a very large village in Freshwater Bay. I have not yet met a people so free and independent, so fearless, whether at home or abroad; caring for no one, and for no tribe, and glorying only in bloodshed, murder, rapine, and robbery" (Chalmers, 1887, p. 280).

A chapter on "Motu-Motu, and Customs of the People," is contributed by E. G. Edelfeld to Lindt's "Picturesque New Guinea" (1887, p. 132). He says, "Motu-Motu is situated on the eastern bank at the entrance of Williams River, in $146^{\circ}9'$ east, and latitude $8^{\circ}13'$ south; the district is an immense extent of sago country, very humid, and beyond all doubt the fever bed of New Guinea. The population here I should estimate at 1500; the people are, as a rule, of tall stature, well built, and in good condition, as here is no lack of food . . . Smallpox has, at some time or other, visited this district; middle aged men say they had a great sickness when they were boys, and many people died . . . On the whole, these people are very egotistic, and not easy to deal with; they are, by nature, rowdy and quarrelsome, and even at one time considered the warriors of the

moving all the time. The dark part is the sunk and the white is the raised part. This river is close to Cape Blackwood. The people are all canibals; their houses are full of skulls.—Vapi Village, Rive Jea, Feb. 8, 1894. R. Bruce."

These designs are the first that have come to Europe from this part of the country. They prove that I was correct in assigning the neighbourhood of Cape Blackwood to the same artistic province as that further east.—*Sept.*, 1894.

coast . . . I have not met with a more selfish lot of people than the Motu-Motuans. The Aroma and Motu-Motu people are certainly the most noisy folks I have met with in New Guinea. They will receive strangers very kindly, but this is policy . . . they possess intelligence, and are quick of comprehension." "Every night the husband leaves his wife and family and betakes himself to an *Elamo*" (p. 133). In dealing with the dance-masks of this district I shall give an abstract from Edelfeld of some uses to which these taboo-houses are put.

Bevan (pp. 138, 139) describes the "black Gulf Papuans with long coarse features and great Roman noses. Great lunged, hirsute fellows, rough, too, in their habits, for not only do the Motu women run away at their approach, but they take 'French' leave to whatever comes handiest. They eat dogs." Again, on p. 144, we read: "The grotesquely euphonious language of these Gulf Papuans is delivered in tones partly nasal and partly deep and guttural, and is a kind of deep-toned shriek or howl . . . Many of the women, nearly all of whom are well developed, are somewhat disfigured by coarse negrillo features, and mops of bushy, frizzly hair. . . . All the men are strongly built, some with aquiline features, and tall, stalwart forms."

Concerning the people at Aivei Movi, the westerly mouth of the Aurar-mar, or Aivei River (long. 145° 17', according to Bevan's Map in the "Preliminary Presentation Pamphlet," 1888). Bevan writes (p. 239):—"These natives have little in common with those met with on the main westerly affluent of the Queen's Jubilee River, of which Omai [lat. 7° 33' S., long. 145° 7' E.], was the type ('the chief of Omai was a short, plump, little black man, with twinkling black eyes and regular pleasant features,' 1888, p. 15). The Aiveians more closely approximate to the Motu-Motuans. Some of the male Aiveians would measure, at least, 5 feet 10 inches in height and 40 inches round the chest; the veins and muscles of their hirsute limbs show out in quite a remarkable way as the result of constant exercise. Circular belts of stiff bark contract the waist of the males to much less than normal dimensions, imparting a wasp-like appearance to their lithe and sinewy figures. The hair is worn long, and is naturally 'frizzy.' Some had scars, resembling pock-marks, on their

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faces. The majority of the males had beetling brows, coarse thick lips and Roman noses. A pleasing exception to the sinister expression of many of the adults was afforded by the open, ingenuous-looking countenances of some of the youths."

At Moveave, at the base of Mount Chapman, Chalmers (1885), writes:—"The people are black, with woolly hair, and are not cannibals" (p. 139). At Jare, a short distance up the Alele (Wickham River), "the population is comprised of black and light-coloured natives, all cannibals" (p. 143). Further west, at Maipua, "the natives are black, with woolly hair, and all cannibals, eating human flesh cooked or uncooked" (p. 144).

The following references to this District may be consulted:—Thomson, pp. 81–87; Edelfeld's Appendix to Lindt; numerous references in Chalmers, 1885, pp. 133–154, 192–204, 224–238; 1887, more especially Maipua* (five miles west of Bald Head), pp. 58–68, Orokolo (ten miles west of Maclatchie Point), pp. 69–75, of these people Chalmers makes the suggestive remark, that they are small in stature, especially the women, and are very like the Koiari tribe at the back of Port Moresby, Maclatchie Point, Annie River, pp. 82–90, Motu-Motu, pp. 280–284; Lyne, pp. 68–95. Elsewhere (1885, p. 163) Chalmers describes the method of counting by an Orokolo native, from whom he obtained three legends—the origin of mankind, the story of *Kanitu*, and a deluge myth. Later on (pp. 233–235) he refers to the *dubus*, dance-mask and a *Semese*-dance. Chalmers compares the customs, &c., of the Motu and Toaripi (1887, pp. 162–188), and of the Toaripi and Koiari (1890, pp. 311–323).

II. Shields.

The shields of this District are easily distinguished from those of other parts of New Guinea, and, so far as I know at present, this is the most westerly limit of the shield in British New Guinea.

The shields fall naturally into two categories—(1) the oblong, and (2) the lanceolate.

* Maipua, Kaipurave, and several other villages, comprise the Namau tribe, who, according to Chalmers (1887, p. 67), originally came from Vaimuru, which he thinks must be on the Aird River. The Vaimuru folk formerly migrated from the west.

(1). The large oblong shield, *naua*, *daua*, or *reua*, appears to be the most common in Museums; it is made of a single piece of thick, rather light wood; the decorated, or outer surface is slightly convex from side to side, but not from top to bottom. The average size is about 1065 mm. (3 feet 6 inches) long, by about 420 mm. ($16\frac{1}{2}$ inches) broad. There is a deep oblong notch in the centre of the upper border, which extends downwards from about one-fifth to about one-fourth of the length of the shield. The left upper "wing" or "battlement" of the shield is usually distinctly higher than the right; rarely are they subequal in height, and still more so is the ratio reversed (pl. vi., fig. 89). The shields are carried at the left side of the warrior, the left arm passing through the notch. The Rev. W. G. Lawes has published a photograph (List, No. 73) of three "Maiva" shields, being carried in this way. The central shield is the same as Pl. vi., fig. 87. The handle is inserted a short distance below the notch; it consists of a loop of cord, which is passed through two holes in the shield; it is slung on to the left shoulder when the shield is carried. According to Mr. Chalmers each shield has a name, but "I cannot find out if they have any real significance. It is possible these names were of significance in the past, which is unknown now."

(2). The second type of shield is more or less oval, or ellipsoidal in outline, the narrow notch is usually from about two-sevenths to one-fifth of the total length. The larger kinds average about 915 mm. (3 feet) long by 405 mm. (16 inches) broad, and the smaller are about 725 mm. (2 feet $4\frac{1}{2}$ inches) long by 200 mm. (8 inches) broad.

The artistic technique is also peculiar to this region. Part of the design and the contours of the rest of it are left in flat relief in one plane, the background and parts of the design being cut in a lower plane. The background is coloured white, the raised lines are blackened by being charred, but are not painted black. Some of the spaces between the black lines are coloured with a creamy red-ochre, a colour which is much less harsh than the red ochre used in Daudai and Torres Straits, and it differs also from the shades of red pigment used in other parts of the Protectorate. Unfortunately, the natives are now largely employing imported red-lead for painting; this they mix with water and not with oil.

The shields of the first series are typically ornamented with a human face, or its derivatives. In a few the face is doubled (Pl. VI., fig. 88); another, of more coarse execution, was presented to the British Museum by H. H. Romilly; a third is in the Dublin Museum (632, 1893).

A very simple design is that represented on Pl. VI., fig. 85; it is taken from a photograph, and I do not know where the original is. I do not know what is the significance of the spirals below the mouth.

Fig. 86, Pl. VI., is in the Berlin Museum. I believe it was one of those obtained by Dr. Finsch from "Kerräma, Freshwater Bay." I suspect that the circular device below the mouth is intended to indicate a shell ornament of the cut and polished end of a white cone-shell [*Conus millepunctatus*]. This is very commonly worn round the neck, and, judging from photographs, it is perforated in the centre, a variation of which does not obtain in Torres Straits. The four club-like figures may be feathers; the natives are very fond of wearing feathers in their hair. Although according to the museum label and Mr. Lawes' list of photographs fig. 87, Pl. VI., comes from Maiva, it evidently belongs to this group of shields. It was collected by Mr. R. Bruce of Murray Island, who gave it to the Glasgow Museum (1889, 67, 40); on the forehead there is evidently a head-dress with coiled strings. There is another shield in the Glasgow Museum from the same locality, and I have a third. The double and degraded human face on Pl. VI., fig. 88, finds it parallel on certain pipes and belts from this district. The two following shields were exhibited at the Melbourne Exhibition of 1888, and the drawings are traced from photographs. The first (Pl. VI., fig. 89) is practically a symmetrical design, which looks as if it might be an extreme form of fig. 85; the eyebrows duplicate the lower spirals; the lateral fringed triangles are vestigial eyes without the pupils. A monocular condition is arrived at in Pl. VI., fig. 90. It is interesting to observe in this figure that although the raised black carving is fairly symmetrical, the red and white pigment are applied in a rather unmeaning manner: it looks as if the artist occasionally did not quite understand what he was doing. Pl. VI., fig. 91, shows well-developed spirals at the ends of what I take to be the strings of a head-band, and a similar pair of spirals below the head. This paves the way to fig. 92, in which the face itself is represented merely by

two eyes, three pairs of spirals occupying the rest of the shield. These two specimens are in the Berlin Museum, the latter (vi. 6772) was collected by Dr. Finsch at Kerräma. There is a shield in the British Museum, presented by H. H. Romilly, in which the eyes are the sole surviving features; they are encircled by three concentric series of toothed bands.

Dr. O. Finsch gives a figure (Taf. xxiv., fig. 4) of a specimen of a simple type he collected at "Kerräma in Freshwater-Baie" (where it is called "*lana*") in the "Annalen des k. k. naturhistorischen Hofmuseums, III., 1888, Vienna." The only other representation known to me is in the "Album," pl. 283, No. 3; the original of which is in Mr. Heape's collection. In this the artist has made the mistake of placing the nostrils between the eyes and the eyebrows; he had placed the eyes so close to the mouth that there was no room in the normal position, and he apparently did not like to omit the nostrils altogether.

Since Plate vi. was drawn and the foregoing account was written, quite a number of these shields have been sent to London, and on several of these human faces do not at first sight appear to be represented, but I believe that almost all, if not all, of them are human derivatives. Very occasionally the whole figure is carved; in one specimen, now in the British Museum, there is a large simple face; the body is small, the arms are flexed, but the legs are straight and extend down one on each side of the notch in the shield, consequently this male figure is upside down.

The second class of shields present us with a greater range of variation and degeneration in the designs than occurs in the previous group. Owing to the absence of intermediate examples it is not always easy to determine the particular line of ornamental decadence which has taken place. It appears to me that, as a rule, these shields are less carefully carved than are the larger oblong kind.

Pl. vi., fig. 93, is in the Cambridge Museum (o. III. 89 × 5), forming part of the Scratchley Collection; the colouring of the original is much rubbed, and I have taken the liberty of colouring the figure as the shield was intended to be coloured. I interpret the design as follows:—The upper curved black line (below the notch) is the eyebrows; the eyes have fused with the nose; the downward red prolongations, margined by a raised

black line on the inner side only may be the lower eyelash (*cf.* Pl. vi., figs. 85-87); the central ring is the mouth; the inferior spirals are the same objects as in other shields; a pair of lateral noses with their nostrils have been added, and, possibly, the ring I have identified as the mouth may also be suggestive of fused eyes for these noses—in the manner which is so common on the carved wooden belts (*cf.* figs. 32, 35, &c.). It would be the merest guesswork trying to decipher the design on Pl. vi., fig. 94; there is another analogous to this, and like it presented to the British Museum by H. H. Romilly, in which the design appears to be a simpler member of this series. A shield (fig. 95) in the Cambridge Museum (o. iii. 89 x 5a) is very simple; here only the nose and one eye are represented in white on a black field; this may be compared with a belt (o. iii. 94. 39; fig. 30) in the same museum. Pl. vi., fig. 96, is very obscure; and fig. 97 is extremely simple. These two shields are in the British Museum, but there is one very similar to fig. 97 in Cambridge.

A rough illustration of an oval shield is given by O. C. Stone;* he calls it *raua*. He says: "The shields used by the Ilema tribe have a nick cut in the top for the left arm to pass through while holding the bow. They are oval, made of wood, about 2 ft. 6 in. long, and 1 ft. 6 in. wide, profusely ornamented with red, white, and black devices, and are attached to the shoulder by a sling."

Pl. vi., figs. 94, 96, have also been sketched by Mr. Partington.†

III. Masks, Bull-Roarer, Ceremonial Tablets, and the Ceremonies at which they are employed.

MASKS.

Very characteristic of this district is the occurrence of masks which are worn during certain ceremonies. In this custom the natives resemble those of Torres Straits and Daudai; but the masks differ in construction in the two districts.

The masks are here made of a light framework of cane or bamboo on which is stretched a kind of bast or some kind of bark-cloth. The surface of the mask is painted white, and the design is coloured in red and

* "A Few Months in New Guinea," 1880, p. 206. † "Album," pl. 282, Nos. 1 and 2.

black. The mid-ribs of palm leaflets are fastened on to the bark-cloth at the junctions of the different colours, like cloisons. This outlining of the colours with cloisons is peculiar to the district now under consideration. Possibly this originated from a desire to assimilate the decoration of the masks with the raised carved patterns on the shields and belts.

I have by me illustrations of over thirty masks from the Papuan Gulf District, and I have personally examined more than half of them. I find this material can be classified as below; it must, however, be remembered that these objects are peculiarly subject to variation, as their form and decoration appear to be selected at the caprice of the maker. This being the case, many other forms may be expected to occur. Two factors appear to me to facilitate the tendency to variation—1. The material of which they are made is quite ready to hand, is very easy to work, and is perishable. 2. The custom of destroying the masks soon after the ceremonies are over for which they were constructed. There is thus very little real continuity in the masks. No condition is more favourable to variation than a rapid succession of short-lived generations. The masks imitating animals referred to by Romilly and Bevan are scarcely represented in the examples known to me. In these, again, we have a fertile field for variation, especially when conventionalized animal forms are combined with the human face or body.

PROVISIONAL CLASSIFICATION OF MASKS FROM THE PAPUAN GULF.

- I. Cap-like, or Helmet-shaped, with Vizier-like Face.
 - a. Human Faces.
 - b. Animal Faces.
- II. Simple conical.
- III. Double conical.
- IV. Conical, surmounted by a Monster.
- V. Flat, ellipsoidal, with projecting gaping jaws.
- VI. Lower portion large, horizontal, with jaws; upper portion vertical, flat, trilobed.

I. The simplest kind of mask is shaped like a cap or helmet, prolonged into a vizier-like face. The cap is usually covered with a vegetable substance to imitate hair, or it may have a covering of human hair.

I know of two specimens of the type which have a human face. On the forehead is a model of the sun-shade sometimes worn by these people. In the British Museum specimen (Pl. VII., fig. 104), the loops above the head at one time supported a mop of hair.*

More frequently a conical animal face is made. Two typical examples (Pl. VII., figs. 105–108), from “Motu-Motu,” are in the Glasgow Museum (89. 67. bg, bf.). In figure 105, the head is bald, the horn-like markings are simply up-turned eyebrows, there being no horned mammal in New Guinea; the three views—(fig. 105) front, (fig. 106) side, and (fig. 107) back—give an idea of the shape of this variety of mask; its total length is 570 mm. ($22\frac{1}{2}$ in.). The mask represented in Pl. VII., fig. 108, appears to be a combination of a pig’s head and a human face; the scalp is covered with a vegetable fibre. The snout recalls that often met with on coconut charms (Pl. VIII., figs 124, 125).

There is a specimen with a distinctly animal face in the Dublin Museum (330. 1890) with human hair, and another in the British Museum with vegetable fibre.†

II. The most common form of mask is that shaped like an extinguisher or dunce’s cap. All I have seen represent a grotesque human face which may have a widely open mouth; but more frequently the face has projecting snout with gaping jaws armed with numerous pointed teeth; the nostrils at the end of the snout are perforated, and often carry an imitation nose-stick. Ears are almost always present; in some as flat pinnæ with large looped lobes (Pl. VII., fig. 110), while in others they are transformed into strange flaps. Crescentic, toothed lines frequently occur over the forehead. Very often the uppermost portion is coloured black, and is prolonged into what looks like the neck of a bottle. Probably, in all cases a long leaf-petticoat was fastened to the mask in such a manner as to envelope all the wearer except the lower portion of his legs. The framework seen in Pl. VII., fig. 109, supported such a dance-dress. These masks vary considerably in size, say from a foot and a-half to several feet in height (about 460 mm. to 1 metre or more).

* Cf. “Album,” pl. 316, No. 2.

† *Ibid.*, pl. 316, No. 1.

A very typical example of this form of mask is sketched in No. 1, pl. 330 of the "Album." The original is in the British Museum (+ 2486).

III. A complication of the preceding type of mask consists in the duplication of the mask, a second conventionalised human face surmounting the simple conical mask, but the latter alone has a projecting snout. A characteristic example is to be found in the Dublin Museum (346. 1890). The illustration of it here given (Pl. VII., fig. 111) requires no comment. I have a photograph from Australia of one which is almost identical with it. A third specimen, from Kerräma, forms part of Mr. Bruce's liberal donation to the Glasgow Museum (89. 67. ba). Pl. VII., fig. 112, is from a photograph I took of this mask in Torres Straits, and from sketches in the Museum. The upper portion, in this instance, has practically lost all trace of the human face. The Dublin mask is 1855 mm. (6 ft. 1 in.) in height, and the Glasgow one is 2045 mm. (6 ft. 8½ in.).

IV. Two examples of a more complex addition to the conical mask occur in Australian Museums. In both cases the latter has a human mouth. Above is a hybrid monster partly human, partly reptilian. The human head has an open mouth which gives a horror-struck expression to the face. The head is furnished with imitation hair, which, with the sunshade, appears as if the head was wearing a European hat. The Adam's apple is indicated in the throat. The arms are bent, and the hands have five extended digits. The body, apparently, is intended to represent that of the crocodile, as there are rows of conventional representations of the keeled dorsal scutes. Lateral projecting stumps are the only indications of hind limbs. None of the photographs I have show the termination of the tail, but it appears to be crocodilian in character.

V. Another type of mask consists of a flat ellipsoidal disc, with a projecting, gaping snout below. The eyes are placed just above the insertion of the jaws, and the rest of the mask is covered with cloissonné decoration. Five of these masks occur in the Dublin Collection, and others are in Australian Museums: the illustrations are taken from the former. In the smallest (Pl. VII., fig. 114), the eyes are enclosed within the usual eye-areas, and the forehead is simply blackened. In a larger specimen

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(Pl. VII., fig. 115), the eyes are simple circles, the eye-areas being absent. This is the only example of such a condition amongst the masks known to me. The remainder of the high forehead of the mask is largely occupied with erratic designs. The largest of these masks (351. 1890) is 2440 mm. (eight feet) in height, and the whole surface is pleasingly covered with a meandering design (Pl. VII., fig. 116). I regard this striking design as being developed from an exaggeration of conventional eye-lashes ("eye-area"), and the covering of a vacant space by an irregular repetition of analogous markings. It is interesting to notice that a distinct pattern is in process of evolution in this mask.

VI. The three largest masks from this district, known to me, occur, respectively, in the British Museum, and in the Edinburgh and Glasgow Museums, but, unfortunately, the first of them is not exhibited. They are all of the same general pattern, and consist of a horizontal, and of a vertical portion. The former somewhat resembles a reversed canoe in shape, the hind end being rounded, and the front end pointed, the latter is produced into a snout with open jaws and numerous teeth. From the lower portion of the body depends a fringe of finely-shredded leaves, stained of a russet-brown colour, similar, in fact, to the women's petticoats commonly worn in S. E. New Guinea. This fringe would entirely conceal the body and upper part of the legs of the man wearing such a mask; its length is from about 760 mm. to about 910 mm. (*i.e.* 2 feet 6 inches to 3 feet). The body varies in length from about 1830 mm. to 2130 mm. (6-7 feet). A small ridge, or keel, runs about half way along the top of the body, and from the end of this a loop of cord passes on to the snout. From the middle of this loop a cord passes right up to the top of the vertical portion of the mask. This latter rises up as a thin plate from near the rounded end of the body, and varies from about 3340 mm. to about 3900 mm. (11 feet to 12 feet 10 inches). About two-fifths up the vertical portion, which is about 520 mm. in its widest part, divides into a long, median narrow portion, surmounted by a cane crown adorned with feathers, and a pair of lateral, vertical slips about 750 mm. in height. In the Glasgow specimen these are broader, and only 480 mm. in height. The structure is made of a framework of cane, and is covered with a kind of bast; this

is painted white, the pattern being in red and black, the colours being separated by the usual cloisons.

Rosette, or ring-like marks, occur more or less symmetrically on each side of the body of these masks, and nowhere else; the conclusion may, therefore, be drawn that what I term the "body" is in reality an elongated head prolonged into a snout, and the vertical portion an additional erection, analogous to that which is sometimes found in masks from Torres Straits.

Fig. 117, Pl. VII, is taken from a photograph, sketches and rubbings of the mask in the Edinburgh Museum (1887, 620, Elema District). It requires no further description. The Glasgow specimen (89. 67. az) was obtained by my friend Mr. Bruce, at Motu-Motu, who gave it to his native city.

A sketch of the British Museum specimen occurs on pl. 315 of the "Album." It gives a general idea of the form and of the nature of its decoration. The scale is about one-twentieth of the natural size. Unfortunately, the background has been inserted from a photograph of another place, and does not illustrate a Toaripi fence. This mask, with others, was exhibited at the Colonial and Indian Exhibition in London (1887). In a note,* C. W. Pleyte Wzn. gives a rough figure of this mask, which he draws the wrong way up. Later, Finsch † corrects this error, and gives additional information.

Baden-Powell describes and figures ‡ four of these masks at Motu-Motu: 'from the back of the head [of the mask] stuck up a huge 'tail,' perhaps ten or fifteen feet high, a 'stay,' covered with feathers, joining the tail to the nose. The dancers merely stood in a row, and moved their feet about in rather a feeble sort of way." These masks, however, were put on simply to amuse Mr. Chalmers' visitor.

Plate VII., fig. 118, represents a specimen in my possession, which is evidently intended for a bird, probably a hornbill. I do not know whether it is complete as it is, or if it originally formed the upper part of a complex

* "Eine Tanzbekleidung von Neu-Guinea," *Zeitschr. für Ethnol.*, xix., 1887; *Verhandl.*, p. 30.

† "Tanzmaske von Südost Neu-Guinea," p. 423.

‡ "In Savage Isles," &c., p. 205.

mask. It may belong to the same category as the model of a drum in the Dublin Museum alluded to on p. 129 ; or it may be a *kaevakuku* hat, as Chalmers has seen one "something like a penguin in shape."

BULL-ROARER AND CEREMONIAL TABLETS.

In connection with the same ceremonies at which the masks are employed, certain flat (or slightly convex from side to side) ellipsoidal wooden objects are used, which are usually prolonged, at one end, into a handle, and are perforated at the other. They are often adorned at the side with vegetable fibre. Their shape bears a close resemblance to that of a bull-roarer, and I venture to suggest that they may have arisen from this widely spread implement, which Mr. Chalmers informs us is used in this district during the initiation ceremonies. An objection to this view might be urged from the circumstance that among those people who employ the bull-roarer during initiation ceremonies, the implement is so sacred that it cannot be exhibited to any woman or uninitiate. But these objects are not bull-roarers, and even if they are modelled upon the bull-roarers, their relatively large size and their decoration alter their character, and it is also very improbable that any initiate would inform the uninstructed that there was any resemblance between the two objects.

Mr. Chalmers has recently given to the Museum of the London Missionary Society two bull-roarers, with the following description :—" *Tiparu*, only seen by a young man after manhood, and then pigs are killed, and a large feast prepared. All women and young people leave the village, lest they should hear it and die. Had great difficulty in getting them." The larger of these measures 510 by 150 mm. (20 in. by $5\frac{3}{4}$ in.), and is carved on both sides on scrolls which are, as usual, painted red, black, and white. The second one is 290 by 44 mm., but instead of being ellipsoidal, it is practically an elongated isosceles triangle with a pointed base ; one side has a slightly carved tooth pattern along the margin.

The first bull-roarer ("Brumm-" or "Schwirrholtz") brought from the mainland of New Guinea is that described by E. Krause.* It is made of

* Zeitschr. für Ethnol., xx., 1888 ; Verhandl., p. 267.

palm-wood, and measures 470 by 68 mm. "There is represented on one side a resting insect, a gad-fly ('eine Bremse oder Dase'), on the other side the same insect in flight, and seen from in front, so that both aspects of the implement, the quiescent and the humming, are suggested." The figures he gives do not demonstrate his identification. I would, however, refer the reader to my remarks on the mantis in discussing the zoomorphs of the Massim District. This bull-roarer appears to come from the neighbourhood of Finsch Havn, in Kaiser Wilhelms-Land.

Bull-roarers from other places are often decorated; those from New Zealand are often carved in very elegant designs.* In the Dublin Museum there are a couple (1887. 27. 30) of carved bull-roarers (*mero. o. mero*) brought from Kimberley, W. Australia, by Mr. Hardman. They are 460 mm. and 435 mm. long, respectively, and about 60 mm. wide. They were used during the initiation ceremonies.†

Mr. R. Bruce gave me an object, *gopi* (Pl. VI., figs. 98, 99) analogous to those now under consideration; he obtained it from an *eramo* at Kerräma. It is 540 mm. long, and 135 mm. wide, and is destitute of the axial prolongations. Unlike the ceremonial tablets, but like the bull-roarer just mentioned, it is carved on both sides.

Fifteen of these ceremonial tablets, as I propose to call them, occur in the Dublin Museum; several specimens are in the British Museum and elsewhere. Without exception they bear delineations of the human form or face. The illustrations on Pl. VI., figs. 100–103, are characteristic examples from the Dublin Collection. The carving is similar to that on the shields, as is also the colouration; the black colour in this case also is caused by charring the wood, and not by the application of pigment.

The illustrations require but little comment on my part. In most the nose is raised, and the nasal septum is perforated. A nose-stick is not now present in any of them. The red line at the nostrils of Pl. VI., fig. 102, is

* Cf. fig. on p. 35 of "Custom and Myth," by Andrew Lang, 1885. The chapter on "The Bull-roarer: A Study of the Mysteries," p. 29, contains much interesting information.

† Cf. E. T. Hardman, Proc. Roy. Irish Acad. (3), I., 1889. "Notes on a Collection of Native Weapons and Implements from the Kimberley District," pp. 57–69. "Notes on some Habits and Customs of the Natives of the Kimberley District, West Australia," pp. 70–75.

probably intended to represent this ornament. The upturned and down-turned lines below the head in this specimen are probably intended to represent arms and legs.

I have a rubbing of a ceremonial tablet, about 890 mm. in length, very similar to Pl. VI., fig. 101, except that the human body is perfectly plain, and, instead of possessing a small head, it was connected by a neck to the large face above, and two conventionalised female breasts project upwards from the base of the neck.

Another tablet, in the Cambridge Museum (o. III. 94. 41), has a face somewhat similar to that of fig. 101, attached to a body resembling that of Pl. VI., fig. 100, but with female breasts, as in the last shield, instead of the pearl shell ornament and belt of fig. 100; the whole body of this hermaphrodite figure is taken up with a smaller figure, something like that in Pl. VI., fig. 101. It is about 1270 mm. in length.

In the Catalogue of the British Museum, five of these objects (+ 5796—+ 5800) are called “Maripo shields.”

There is one fine ceremonial tablet in the Dublin Museum (630. 1893), 1435 mm. in length, which has a head very similar to Pl. VI., fig. 100, but it terminates more like fig. 103; the small arms are flexed, and there is a crescentic breast ornament; the body is legless, very attenuated, and tapers off to a tail like a lizard's. This figure bears some resemblance to Pl. VII., fig. 113.

In some of the smaller ceremonial tablets the carving is rude, and the design is often very obscure. Sometimes a couple of horizontal faces are added to the usual vertical face, as in a specimen in the Dublin Museum.

CEREMONIES AT WHICH DANCE-MASKS ARE EMPLOYED IN THE PAPUAN GULF.

The employment of masks in religious ceremonies is a matter of considerable interest, and even now very little is known, with certainty, as to the nature of the ceremonies in which they are employed, or of the significance of the masks themselves. Such being the case, I have thought it advisable to bring together all I could discover on this subject, with the hope of inducing residents in this district to supply more precise details.

Almost the whole of our knowledge concerning the natives of the Papuan Gulf is due to the energetic pioneer missionary of the mainland of British New Guinea. No one had travelled more about the British Protectorate, before the advent of Sir William Mac Gregor, and no one has a better acquaintance with the natives than James Chalmers, or "Tamate," as he likes to be called by his white and coloured friends. The friendship of Tamate is a passport for several hundred miles in British New Guinea.

Chalmers (1885, p. 151) states that, "the gods live in Elema." The chiefs on board the Port Moresby trading canoes, on arrival, repair at once to the "temple" with offerings, and again when ready to start on their return voyage. "The centre post in every house is sacred to *Kaevakuku*, and her portion of food in every feast is first offered there. The first-fruits belong to her. All planting is useless unless blessed by the gods. The sun belongs to *Kaevakuku*. Rain, lightning, and thunder to *Semese* and *Tauparau* . . . *Kaevakuku* is represented by a large frame of wicker-work; her hat is large, and is something like a penguin in shape, and when she is consulted in difficult affairs, she gives her answers by shaking her head or remaining still. . . . *Semese* and *Tauparau* are made from blocks of wood, and stand outside of some temples, and against all the posts running down the centre. . . . On a feast day certain parties dress up with different kinds of leaves from the bush, and with ornamented sticks, come into the village representing *Kaevakuku*."

In his later book (1887), he quotes the following from his Journal, written on October 13, 1883, when at Vailala, a village on the eastern point at the mouth of the Annie River (long. 145° 26' E.):—

"The natives have *Kaevakuku* here also. We saw the men wearing the masks first, on the other side, and taking a canoe; they crossed, paddling themselves. When coming along the beach from their canoe, some of the men and all the lads in our *dubu* began shouting, sprung down from the platform and away to the bush. The shouting informed the people in the village of the arrival, and the place was soon cleared of all women and children.

"The *Kaevakuku* are connected with a sacred festival, and they hold the power of taboo over coconuts and food required for the coming feast. All the men engaged in *Kaevakuku* are sacred for at least three moons before the feast, not seeing wife or children, and not living anywhere near their own houses. They have large masks, two, three, four feet in height, which they wear when going about. Eight of these masks are now deposited in the Sydney Museum. These

ROYAL IRISH ACADEMY.—CUNNINGHAM MEMOIRS, NO. X.

[14]

masks are generally shaped like a fool's cap, and the face represents some animal with a very long mouth and teeth. The hat is made with small branches, wickerwork covered with native cloth, painted white, red, and black.

"They wear a cloak about two and a-half feet long, and a petticoat, or kilt, about eighteen inches long, both made from the fibre of the large yellow hibiscus. They are not nearly so imposing as the Maiva *Kaavakuku*, who look like walking haystacks with large masks on the top.

"Before coming up to our platform they danced and rushed about, brandishing a stick held in the right hand. When finished, they ascended and went right in, where they undressed for a breathing spell. I tried one of the masks on, but it was too small for my large pate. . . .

"On entering, it [Meka's *dubu*, 'a very fine building'] was very dark, but after a little I could see better. There were eighty masks arranged down each side, forty a side, and alongside of each mask a stick. There were drums; pretty small ladders, made of cane, and used to ascend when beautifying the *dubu*; spears, clubs, bows and arrows, and many other things. Outside there is a splendid platform at present, because of *Kaavakuku*, surrounded with coconut leaves, so that impure eyes may not peer into the mysteries. Overhead, very high up, is the long peaked roof, in which many arrows were sticking, and small pieces of wood ornamented with feathers representing the spirits (pp. 49-51).

[October 20, 1883].—"I have to go to a large feast at *Kaavakuku* [*sic*, Vailala?]. A large crowd has assembled from the villages round, and many from Orokolo. Everywhere there is food, cooked and uncooked, in heaps and hanging on poles, chiefly sago prepared in every imaginable way. Betel-nuts and pepper also abound. On the platform of my friend Meka's *dubu* is a large quantity of cut-up pork, and all around the platform streamers are flying, made from the young sago frond. . . . There comes a man dressed in a tall hat, or mask, resembling some strange animal with peculiar mouth and sharp teeth; his cloak and kilt are of yellow hibiscus fibre, and a small stick is in his hand. He has come from some distance back in the bush, where, I am told, many are assembled, and that all the masks and dresses I saw the other day in the *dubu*, with their owners, are there. He danced about for a short time, when an old man came before him with a large piece of pork, gave it to him, and he went away, followed by two young men carrying a long pole of food, sago, coconuts, betel-nuts, and pepper. Another *Kaavakuku* followed, and did the same as the first, this time in the *dubu*; the conch-shell is being blown as for a pig, and soon a live one appears on a pole between two men. It is placed on the ground, *Kaavakuku* dancing round and over it, when a bow and arrow is presented to him, and he backs a little, says something, lets fly, and the pig soon breathes his last. The two men pick the pig up and all leave, followed by two youths carrying food. More *Kaavakuku* come, this time five, and all dance until they receive presentation of pig, when they, too, clear out. So it goes on until the whole eighty have been. Some get dogs, whereupon they catch them by the hind legs, and strike the head furiously on the ground. Not a few are displeased with the small quantity given, and persistently remain till they get more.

"I walked into the bush about a quarter of a mile, where there was a large crowd of men, some armed, and every where I turned weapons could be seen. Some were cutting up pigs, others dogs, putting the pieces into *uros* [earthenware pots], and upon the fire to cook. Some

distance back was a large representation of *Semese*. It was a mask, fully ten feet high, and three broad; it was surrounded with feathers of various kinds, and down the middle was curiously painted. I was anxious to secure some of the masks, and especially the one representing *Semese*, but was told that they all had to be burned. I saw some of my friends, who assisted me in securing seven, but neither love nor tomahawks could obtain *Semese*. Soon, all round, fires were lighted, and masks, cloaks, and kilts were blazing. I could not remove the masks I had obtained until dark, that no one might see them, and especially lest a woman should, as, according to tradition, she would soon sicken and die . . .

"The *helaga* [sacred period] is over, and all the men go to their homes, from which they have been separated for some months."—(pp. 72-74.)

Semese at Maclatchie Point, Annie River, January, 1884 :—

"During our stay in one of the *dubus* a peculiar feast took place. A lad who had never been initiated, never seen the inner precincts of the *dubu*, and never looked upon the wonderful fetish of *Semese*, was to receive his introduction. His father's pigs were dying fast of some unknown and incurable disease, and though his son was over young, he determined to stretch a point, so gave a feast at which the initial processes of the entering-in would take place, though years would elapse ere the final mysteries were disclosed. A pig was killed, and a large quantity of sago prepared in various forms. At midday a portion was brought, a dish of cooked sago was placed in the centre of the temple, and near the centre-post an old coconut, over which a man stood with a stone axe. Inside, in the dark, was a lad with the fetish attached to a piece of twine, swinging it. As soon as it began to give forth a strong, burring sound, from the velocity of its motion through the air, the man said a few words, split the coconut in two, and a great shout was given by all present. Those sitting by sipped the sago and ate the coconut. All the afternoon the fetish was kept swinging, and the burring sound given out could be heard nearly a hundred yards away. About five o'clock the father and three children arrived, the eldest, who was grandly adorned, being led by the hand, while all carried food. They were preceded by an elderly man, who placed over the entrance to the *dubu* a neatly-arranged young leaf of sago, and on the centre-post another at which the offerings that had been brought, consisting of food, arm shells, tomahawks, bows and arrows, were placed. The young lad was then led by the hand and shown the inner precinct, and had presented to his gaze the *Semese* fetish.

"He looked frightened, and seemed glad when he again stood by his father. Friends then gave him presents of bows and arrows. The lad's uncle, his mother's brother, then came and gathered up the food and presents, and carted all away. All left but the boy, who seemed now more at home, and walked about. He slept that night in the inner *dubu*.

"Overhead, near the centre, carefully wrapped, hangs the most sacred of all the representation of *Semese*. Only old men have seen it; and various are the initiatory steps before it can be seen. I tried much to have a look, but innumerable excuses were made, and I had to leave without attaining that higher knowledge. There was great feasting on dog and pig that night until late." *

* Chalmers, 1887, pp. 85, 86.

Quite recently* Mr. Chalmers has given an account of the Toaripi (Motu-Motu) and Koiari tribes, in response to a list of questions compiled by "The Australasian and Polynesian Races Bibliography Committee." This gives us a valuable summary of the most important customs and beliefs of two very distinct New Guinea tribes in a convenient form for comparison. The following is his account of initiation into manhood among the Toaripi tribe:—

"Lads, when about seventeen or eighteen, leave off the sporran worn by all boys, enter the *Eramo* (temple or *dubu*); and these adopt the string, shave the head, and remain for many months until the hair has grown long and frizzy. Before entering the *Eramo* the father, or nearest relative, kills a pig and makes a feast, and invites all friends to assemble. A relative takes off the sporran, and fastens on the *siki* (string), after which all sit down and eat. When the hair is well grown, he leaves the *Eramo*, and again there is feasting. He is now considered a man, and is marriageable. When in the *Eramo* he is not supposed to look upon or be seen by a woman. Female friends cook food and leave it outside, making a noise as they leave, and shortly the lad descends, takes it into the *Eramo*, and eats it. They spend the time in the *Eramo* making armlets from fibres. The old men, who live mostly in the *Eramo*, occupy themselves in working (plaiting) belts, which are worn by young men after birth of the first child. When the first child is born the father cooks a pig and food, and the belt, being purchased with food, is then fastened on, there to remain until rotten, or, on death of a near relation, it is cut off.

"When in the *Eramo*, various kinds of food may not be eaten, especially taro; sago and bananas may be eaten, and only a very few kinds of fish. The young man's hair is shaven off on entering, by a friend, for whom he will do the same.

"Not until after they have left the *Eramo* is the "Roaring Bull" [bull-roarer, *tiparu*] seen. On the occasion of its being worked, all women and children, and young men, keep away. Near to here are two large houses filled with masks, which are all very sacred, and are now kept from vulgar gaze until after a large feast, soon to be held, when they will be used for dancing, and afterwards burnt. A short time ago two old men sat in one of the houses, communicating with the spirits and working the 'Bull.' Large quantities of food were brought them by the men. Not until a youth has been in the *Eramo* can he wear a mask, or join in the dances and drum-beatings of the tribe, and only then is he considered a man. Not until he has descended from the *Eramo* does he know a woman. All singing, dancing, and drum-beating are considered sacred, and never uselessly done.

"There is no circumcision practised in the Toaripi Tribe."—(pp. 312, 313.)

It was at the end of November, 1879, that Mr. Chalmers saw, in Motu-Motu, hanging over the entrance to the *Eramo*, "a representation of

* Rept. Austral. Assoc. Advanc. Sci., ii., 1890, pp. 311–323.

a mermaid, half fish and half human. It looked old.”* This may be the same mask that I have figured on Pl. VII., fig. 113.

Chalmers (1887, pp. 58–68) also dwells at some length on “temples,” and people of Maipua, a large village, west of Bald Head. In front of nearly all the houses hang large representations of *Semese*. . . . In each of the courts (of the temple) are numerous skulls of men, women, and children, crocodiles and wild boars, also many breasts of the cassowary. All are carved, and many painted. The human skulls are of those who have been killed and eaten.” In the sacred part of the temple were “six curious-looking figures [*Kanibus*] made of cane. The mouth was like a frog’s, enormously large and wide open; the body seven feet high in the centre, and about nine feet long, had the appearance of a large dugong. . . . I fancy each man who has killed, or helped to kill, a foe, has his own peculiar painting and carving on the skull.” A reason assigned for the erection of the *dubu* is that the men might be sacred, and have a place to themselves, where they could present the slain to *Kanibu*, and have a place for rejoicing after a successful man-hunt. “To the *Kanibus* the inhabitants of Maipua give offerings: pearl-shells, arm-shells, pigs, human beings, and skulls. The sick apply to them for healing, their friends presenting gifts. When wishing to fight, they appeal for direction to these wicker images, &c. . . . One *dubu* is 200 feet long, and has in its sacred place twelve *Kanibus*. The carpet of sago bark down the passage is really beautiful; it has figures of men, crocodiles, &c., carved all along its length.” Thomson (*l. c.* p. 86) also refers to this village, but characteristically refrains from even hinting that Mr. Chalmers was the first to go there, or that he has so admirably described the people. I have rubbings of the carving of some of these skulls which recently have come to London. I do not know who collected them, but it certainly was not Mr. Chalmers. An Orocolo legend of *Kanitu* [*sic*] is given by Chalmers (1885, p. 163).

Mr. E. G. Edelfeld, who has lived some time in this part of New Guinea, gives the following account in a supplementary chapter in Lindt’s “Pictorial New Guinea”:—

“Usually, in September and October, when vegetables are abundant, youths are sent into the *Elamos*, fourteen or fifteen years old—all hair shaved off their heads. On the day of their

* “Work and Adventure in New Guinea,” 1885, p. 138.

entering the *Elamo* [this is the way Mr. Edelfeld spells the word, the letters *l* and *r* are frequently interchangeable, here as elsewhere; cf. 'Roro,' or 'Lolo,' Yule Island] all the people feast on pigs, yams, taros, sweet-potatoes, sugar cane, coconuts, and betel-nuts, &c. All this food is heaped up outside each *Elamo*, where a boy, or several, is to be imprisoned, it is then distributed, cooked, and consumed; singing and dancing follow. These boys remain in the *Elamo* for eight or nine months, or until such time as the hair is completely grown over the head, so that when they marry—after they come out—it can be tied in a mop at the back of the head. All the time they remain in the *Elamo* they are allowed to communicate with none but men, who bring them food. They take outdoor exercise at night, as they must avoid all contact with women, and not even be seen by old or young. When the hair is grown to the required length, they are set free; they are then considered men, and allowed to take part in matters concerning the tribe. All married and single men sleep in the *Elamos*; here they gossip, eat, drink, and create mischief of every description. . . . The images of birds, fishes, pigs, and men are kept in these houses only as ornaments, as these people acknowledge no deities."

He also says there must be bloodshed in order that the youths who are placed in the sacred houses may "come out strong, warlike men."*

Romilly † writes:—

"In the Gulf of Papua symbolic dances are constantly performed, and much superstitious importance surrounds them. Each man is dressed to represent some bird or fish, and the dresses they appear in are marvels of ingenuity and construction. The shark is a very favourite symbol, as are also wild ducks and geese. No doubt each man, in selecting his dress to dance in, is paying a tribute to the bird or fish in whose image he presents himself. The shark has ferocity and cunning, the wild duck swift flight and watchfulness, the cassowary strength and speed of foot. One could go on multiplying endless instances."‡

I will conclude with a quotation from Mr. Theodore F. Bevan's book, p. 144. The inferences he adopts are evidently taken from the Blue Book to which he refers:—

"Their most imposing ceremony is the symbolic dance to which much superstitious importance is attached. The masks and dresses worn on these occasions are marvels of ingenuity and artifice in construction. Most of these masks are of great size and weight. I have seen one such, twenty feet in height, which had to be supported on the owner's head by half a dozen followers. The material employed is usually the fibre of a sterculiaceus tree sown on to a slender

* New Guinea Blue Book C—5883, 1890, p. 151.

† "From my Verandah in New Guinea," p. 88.

‡ This statement requires corroboration; it is probably the author's idea as to the signification of the masks; I doubt whether it is the real one.

framework of bamboo; the whole worked into the most curious representations of birds, beasts, fish, and the supernatural, and appropriately coloured with numerous dyes, ochres, and pigments. It has been said that in selecting a dress each man pays tribute to some particular spirit,* and gives expression to his own fancied attributes, or those of dead friends, at the same time. Thus, a shark's dress would signify ferocity and voracity; a bird emblem, swiftness and wariness; and even a turtle, strength and stolidity, and so on.† As (at South Cape) an alligator was long known by the name of a defunct chief, so (four hundred miles westward in the Papuan Gulf), fragmentary traces are not wanting of a shadowy belief in transmigration; of which the nature of the images worn at these symbolic dances, and held as sacred for some time afterwards, is sufficient illustration."

IV. Belts.

The carved wooden belts, *kava* or *kaba*, are as characteristic of this district as are most of the other objects made by these interesting people.

These belts vary from about 100 to 130 mm. wide, although some are narrower, and others, again, are wider than these measurements. The length is about $1\frac{3}{4}$ to 2 metres or more.

The belts take two and a-half or three turns round the body, the outermost end being lashed by a cord and secured by a shell button (*toratora*) to the corresponding part of the first turn at the end of the pattern. They are made from tough, hard bark. They are worn only by the men; and it is said that even they can only wear them after they have gone through all the initiation ceremonies. According to the latest information from Mr. Chalmers, the *kava* are made by Vailala and Orocolo natives, and bought by the Toaripians, and worn only by men who have passed through all the stages, and the wearer is entitled to partake in all feasts and dances.

The design is so engraved that the pattern is in flat relief; this is kept dark, and shows up against the whitened background. Certain details of the design are often picked out in red, the exposed uncarved portion of the belt, and most usually the narrow plain border above and below the pattern, are usually painted red. The design commences at one end of the belt, and terminates when one circumference is nearly attained, and it has rounded off or pointed, and occasionally square ends.

* *Vide* Appendices to Report of H. M. Sp. Comm., Brit. N.G., 1887.

† See note ‡ on page 110, opposite.

In the majority of belts the whole design is surrounded by a zigzag line, rarely a toothed or other border, and still more rarely without any border at all. The ends of the ornamental band often contain a design, most usually a conventional face, which differs from the general pattern of that particular belt. There is a wonderful diversity of pattern in these belts, yet, at the same time, there is a fundamental similarity in the design which clearly shows a community of origin.

With but few exceptions the decoration on these belts is derived from the human face. I have spent a considerable amount of time in analysing and classifying the examples which have come under my notice, as it was interesting to determine how many of the possible combinations were actually employed by these artists. I have examined photographs of several belts, and some of these it would be most instructive to figure, but the photographs were of too small size to copy with sufficient exactness, especially as being in the round there was a good deal of foreshortening. All the illustrations are from rubbings I have taken from the objects themselves, and thus the illustrations are absolute facsimiles of the originals.

I have not wearied the reader with minute descriptions of each belt, as the illustrations speak for themselves. A very considerable proportion of the belts known to me exhibit a true decorative taste on the part of the artists, and in some cases pleasing and ingenious patterns have been evolved. It may not be superfluous to point out that, whereas "eye-spots" are usually intended for eyes, they are sometimes employed as an appropriate decorative device; similarly, toothed lines may represent human teeth, rarely hair, and not unfrequently they are purely ornamental.

Few specimens in Museums are labelled with a definite locality; in the Berlin Museum there are examples from Kerräma and Maiva.

The following classification must be regarded as tentative, and when other specimens are studied the lacunæ will probably be filled up, and other series established. It is not always easy to decide the exact classificatory position of some examples, although there may not be any doubt as to the general scheme of their decoration :—

CLASSIFICATION OF CARVED PATTERNS ON WOODEN BELTS FROM THE GULF OF PAPUA.

HUMAN FACE DERIVATIVES.

SERIES I. UNISERIAL, VERTICAL.

1. Faces looking the same way.
2. Faces alternately looking up and down.

SERIES II. UNISERIAL, HORIZONTAL.

1. Faces looking the same way.
2. Faces alternately looking towards and away from one another.
 - (a) All faces separate.
 - (b) Faces looking towards one another grouped together.
 - (c) Faces looking away from one another grouped together.

SERIES III. BISERIAL, VERTICAL.

1. Faces only looking towards one another.
2. Faces only looking away from one another.
3. Faces alternately looking towards and away from one another.
 - (a) All faces of equal size.
 - (b) Faces looking towards one another most prominent.
 - (c) Faces looking away from one another most prominent.

SERIES IV. BISERIAL, HORIZONTAL.

SERIES V. TRISERIAL (II. + III.).

I. Vertical faces looking towards one another.

1. Horizontal faces looking the same way.
2. Horizontal faces alternately looking towards or away from one another.
 - (a) All faces of equal size.
 - (b) Vertical faces monopolising pattern.
 - (a) Horizontal faces separate.
 - (b) Horizontal faces looking towards one another grouped together.
 - (c) Horizontal faces looking away from one another grouped together.
 - (c) Horizontal faces monopolising pattern.
 - (a) Horizontal faces separate.
 - (b) Horizontal faces looking towards one another grouped together.
 - (c) Horizontal faces looking away from one another grouped together.

II. Vertical faces looking away from one another.

For the convenience of those who wish to study these objects, I add a classified list of the examples known to me in various Museums:—

I. 1. —. 2. Berlin, vi. 6745; Cambridge, o. iii. 94. 38.

II. 1. Glasgow, 87. 30. k. 2a. Cambridge, o. iii. 86. 74. 7. b. Cambridge, o. iii. 86. 74. 8; Glasgow, 87. 30. k2; Berlin, vi. 4045; Glasgow, 89. 77. bh2. c. Berlin, vi. 6746 (Kerräma); B. M., 18, 10–10, 22.

III. 1. B. M., + 5421; Rome, 33447 (Kerräma); Cambridge, o. iii. 94. 39.; L. M. S.; Partington's Collection. 2. B. M., + 5423; Glasgow, 89. 77. bh.; Bruce; Author's Collection (Motu-Motu). 3. A. Dresden, 6361; Berlin, vi. 3775. B. Heape; L. M. S. c. —.

IV. —. None known to me.

V. I. 1. —. 2. A. B. M., + 5422; Dublin, 304, 1890. B. a. Berlin, vi. 4046. b. Dublin, 306, 1890; B. M., + 5424; Berlin, vi. 4044. c. —. c. a. Berlin, vi. 6744 (Maiva). b. Edinburgh, 1890. 174. c. Glasgow, 89. 67. dk. (Maiva).

II. L. M. S.

Unclassed.

Berlin, vi. 4043; vi. 4059; vi. 6747 (Kerräma); B. M., 89, 12–5, 33; + 3827; Cambridge, o. iii. 94. 40.; Dublin, 305, 1890; Rome, 33446 (Freshwater Bay); Saville-Kent; L. M. S.

Besides these forty-three belts, of which I have rubbings, I have photographs as follows:—II. 2a (1); III. 1. (1); III. 2. (1); III. 3. A (2); III. 3. B. (2), and others. I do not know where any of these are located.

SERIES I. UNISERIAL, VERTICAL.

1. *Faces looking the same way.*

No example of this is known to me.

2. *Faces alternately looking up and down.*

I have come across only two belts which belong to this series. In one, which is the very simplest, I have seen, fairly similar, conventionalised

human faces are serially repeated (fig. 26). It is in the Berlin Museum (vi. 6745). The second is in the Cambridge Museum (o. III. 94. 38), and



FIG. 26*.—Berlin Museum (vi. 6745).

is extremely modified (fig. 27). A comparison of the variations which occur in the other belts will support the conclusion that this belt must be placed in the first series. The most prominent feature of each face is a



FIG. 27.—Cambridge Museum (o. III. 94. 38).

large, red mouth, and these have an evident alternate arrangement. In the face to the left the eyes and nose are represented; in the next face only one eye is depicted; in the two remaining faces the eyes have disappeared, and there is nothing distinctive about the nose. It is interesting to note that, apparently, the artist had mistaken the mouths for eye-areas, as he has inserted an eye in each of them.

SERIES II. UNISERIAL, HORIZONTAL.

1. *Faces looking the same way.*

In the Glasgow Museum there is a belt (87. 30. k.) with four faces, which are as degenerate as in the last example; three of these face one

* Figs. 26 to 45 are photographed from rubbings of part of the decoration of wooden belts from the Papuan Gulf. Figs. 27 and 40 represent the whole of the ornamentation. All are one-fourth natural size, except fig. 40, which is one-fifth natural size.

way, and the fourth, which is at one end (fig. 28), looks in the opposite direction. It is not unusual for a face to be carved at each end of the decorated portion of a belt, and as these faces almost always look towards the pattern, the anomaly of one face in this belt looking a different way



FIG. 28.—Glasgow Museum (87. 30. k).

from the remainder is apparent rather than real. But the most interesting feature in this belt is the fret pattern. I shall allude to this again in the final portion of this section. The extremely degenerate face appears to be, as in figure 27, a red mouth containing an eye; the central chevron also occurs in figure 45, where it represents the nose.

2. Faces alternately looking towards, and away from, one another.

(a). All faces separate.

There is a belt in the Cambridge Museum (o. iii. 86. 74. 7) with six equal faces, each of which is represented only by a pair of eyes; of the two



FIG. 29.—Cambridge Museum (o. iii. 86. 74. 7).

eye-lashes which form the eye-area, the lower (or inner) is much the longer. The terminal eye-areas are coloured red.

(b). Faces looking towards one another grouped together.

An example of this subdivision also occurs in the Cambridge Museum (o. III. 94. 39). Each of the two pairs of faces is included within a double line; every face is distinct, and has but a single eye; the nose, with its wide nostrils, is coloured red, and the mouth has but a single row of teeth.



FIG. 30.—Cambridge Museum (o. III. 86. 74. 8).

A belt (fig. 31) in the Glasgow Museum (87. 30. k. 2), evidently belongs to this division, but if it had been modified only a little more, it would have been impossible to class it. The pattern consists essentially of three pairs of faces, two of which are shown in the figure; they can be



FIG. 31.—Glasgow Museum (87. 30. k. 2).

recognised by their conjoint mouths; from these spring blind eye-areas, the recurved loops of which are usually forked. Eyes occur in the intervals between the groups of faces. The terminal faces look away from the rest of the pattern, which is unusual.

There is a belt in the Berlin Museum (vi. 4045) which has a complicated design which I suspect belongs to this series; only contorted blind eye-areas are left, and rosettes take the place of mouths.

(c). Faces looking away from one another grouped together.

The third subdivision includes those belts in which the faces which look away from one another are grouped in pairs. An elegant example

(fig. 32) of this occurs in a belt from Kerräma in the Berlin Museum (vi. 6746). The two pairs of eyes of the two faces which are turned away from each other are represented by a single eye from which a longitudinal



FIG. 32.—Kerräma, Berlin Museum (vi. 6746).

line extends on either side to the two mouths, each line represents a nose, the nostrils of which are placed quite close to the eye. The eyes are surrounded by simple red areas. The spaces between the mouths, above and below the eye (speaking in terms of the belt, and not of the faces) are occupied by additional mouths, which are evidently inserted from a sense of symmetry, that they are supplemental, and not essential, is proved by the absence of any nasal line connecting them with the eye. The spirals below the mouth occur on several shields (Pl. vi., figs. 85, 91). Each panel of this belt may be compared with the shield figured on Pl. vi., fig. 88.

An interesting belt in the British Museum (18. 10—10. 22) exhibits quite a different modification of the same motive. The pattern (fig. 33) consists of a series of eight-rayed figures with bent arms, and a central eye-spot. A comparison of these figures with the eyes on masks, and other objects from this district, proves that each of the eight rays is a symmetrical



FIG. 33.—British Museum (18. 10—10. 22).

coalescence of two pairs of eye-areas. The angled double lines are clearly those prolongations of the eye-area, which in many cases tend to enclose the mouth, and which probably represent the cheek-folds; and thus they

demonstrate the interpretation that each star is derived from two horizontal faces which are looking away from each other, and of which nothing remains but a confluent eye-area, enclosing a single eye. The terminal faces are sufficiently normal; but if two such faces were placed back to back, and the eye-areas were confluent, and the four eyes fused into one, and finally the nose and mouth were eliminated, we should have star-like figures resembling those which do occur. If a reflector is placed across the eyes of the terminal face in fig. 33 (at right angles to the plane of the paper, and across the long axis of the belt) a star-like figure can be seen, which is very similar to those in the rest of the belt. This is one of the few belts which have no border pattern.

SERIES III. BISERIAL, VERTICAL.

This group is a duplication of Series I. I have a photograph of a belt belonging to this series in which all the faces are equal in size, and are carved in such a simple manner that a diagram would represent it with fair accuracy. The advantage which this series has over Series I. lies in the fact that the faces naturally group themselves in relation to the median horizontal line, about which, so to speak, a pattern can crystallise, and also more combinations are possible.

This series can be divided into three groups—(1) in which the faces look only towards one another; (2) in which they look only away from one another, and (3) in which they look alternately towards, and away from, one another. Three alternatives may occur in the last—(A) the equal development of each series of faces, and their derivatives; (B) the *vis-à-vis* falls may be the most prominent, and so give rise to hour-glass-shaped figures; or (C) the preponderance of the faces looking away from one another, thus resulting in a series of ornamental diamonds.

1. *Faces only looking towards one another.*

There is a very typical example of this series in the Cambridge Museum (o. III. 94. 39), and another is in the British Museum (+ 5421). In the former between each of the four pairs of *vis-à-vis* red faces, there are traces of paired faces also facing one another, of which scarcely any feature can

be traced, except their coalesced mouths. The larger faces have an exceptional width. I am inclined to regard the abortive faces as supplemental, rather than as having been crowded out by the lateral extension of the prominent faces. In the latter (fig. 34) the pairs of faces are separated by red stars, each of which contains an eye-spot. The representation of a



FIG. 34.—British Museum (+ 5421).

lizard on this belt is noteworthy. The faces on this belt exhibit varying degrees of degeneracy, and from this we are naturally led on to a belt collected by Dr. Finsch at Kerräma, and which is now in Rome (33447). Here the faces are represented solely by their eyes, which may be eyeless eye-areas or simply spirals, and by a zigzag which stands for the nose. As in the British Museum belt red stars with eye-spots alternate with the paired faces.*

2. *Faces only looking away from one another.*



FIG. 35.—Toaripi (Author's Collection).

A specimen in my own possession (fig. 35) evidently belongs to this division, but the faces are very degenerate; it came from Motu-Motu.

* This belt has been figured by Dr. Finsch in his paper, "Ueber Bekleidung, Schmuck and Tätowirung der Papuas der Südostküste von Neu-Guinea," Mittheil. Anthropol. Gesell., Wien,

There is a very similar belt in the British Museum (+ 5423) which exhibits a further stage of degradation. In a handsome belt (fig. 36) in the Glasgow Museum (89. 77. bh) the eyelashes, as usual, point towards the mouth, which, in six out of the eight faces, is indicated by a row of teeth



FIG. 36.—Glasgow Museum (89. 77. bh).

set in apposition to the marginal zig-zag; the triangle below the eyes is probably the last trace of the nose. Between each pair of faces is a rosette of concentric black, red and white lines, some of the former being toothed.

3. *Faces alternately looking towards and away from one another.*

(a). *All the faces equal.*

In the Dresden Museum there is a portion of a small belt (fig. 37) which is interesting on account of its angular treatment; the vanishing faces are, however, still recognizable. (Strangely enough this belt forms part of the back of a Torres Straits mask (No. 6361). The mask, which is a very characteristic one of that district, consists of an imitation of a crocodile's head surmounted by a human face, and is described on pp. 3, 4 of Dr. Meyer's Memoir on the Papuan Masks in the Dresden Museum. He simply alludes to this belt as "a broad, beautifully ornamented wooden band situated at the back of



FIG. 37.—Dresden Museum (6361.)

1885 (translated in the Rev. d'Ethnogr., 1886, p. 49); and again in the Annalen des k. k. naturhistorischen Hofmuseums, Wien, 1888 (p. 315, fig. 25). In the former he says, "a remarkable kind of body-girdle, called *gaawa*, 3-6", broad, made of a thin, but hard, bark."

ROYAL IRISH ACADEMY.—CUNNINGHAM MEMOIRS, NO. X.

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the head" of the crocodile. There is absolutely no doubt that it is a Motu-Motu belt, and we may suppose that some Torres Strait islander had shipped in some pearl-shelling, or trading vessel in which he had voyaged to the other side of the Papuan Gulf, where he obtained the belt, and on his return had utilised it for its present purpose. There is probably scarcely an islander living who has not "shipped" at one time or another, and I have myself obtained a typical Kerepunu shield at Tud (Warrior Island).

An equally simple modification of this subdivision is to be found in the Berlin Museum (vi. 3775). In this case (fig. 38) the two eyes of each face have



FIG. 38.—Berlin Museum (vi. 3775).

amalgamated, and a short line represents the nose; but their disposition is still typical. The chevrons merely fill up the vacant angles. The terminal face is represented by a red three-lobed area, containing an eye-spot, which may be compared with the vestigial faces in fig. 28. The oblique lines uniting the noses are evidently the remains of the mouths of their respective faces; a tooth-pattern may be present or absent.

(b). *The faces looking towards one another most prominent.*

A belt (fig 39) belonging to this subdivision, and which illustrates the commencing preponderance of the *vis-à-vis* faces over the others is sketched

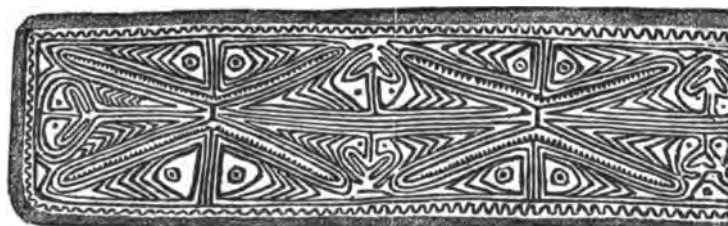


FIG. 39.—Collection of Charles Heape, Esq. (cf. "Album," pl. 312, 206.)

in the "Album" (pl. 312, No. 6); it is in the possession of Mr. Charles Heape, to whom I am indebted for the rubbing from which the figure was

photographed. The mouths of the larger faces are much drawn out, and the teeth are indicated in the upper jaw only. There is a belt in the Museum of the London Missionary Society, in which most of the faces, especially those looking away from one another, are degraded, and there are in addition two human figures placed lengthwise.

(c). *The faces looking away from one another most prominent.*

I do not know any example of this possible variation.

SERIES IV. BISERIAL, HORIZONTAL.

No example of this is known to me.

SERIES V. TRISERIAL.

This is a composite series, and may be described as a linear quincunx compounded of parts of Series II. and III. The pattern consisting of pairs of faces looking towards one another (III., 1), these more or less alternate with a longitudinal series of horizontal faces which alternately look towards and away from one another (II., 2).

From the variety of their component elements the patterns in this series of belts are liable to considerable variation. The design as a whole appears to me to be based upon a biserial series of vertical faces looking towards one another (III., 1). From the nature of the case in this disposition there are diamond-shaped spaces left between the pairs of faces. In a Cambridge belt (o. III. 94. 39) the intermediate eyeless faces may be supplemental and inserted to fill up the spaces left by the larger faces which by their unusual lateral prolongation considerably reduce the interval between each pair. In other belts (fig. 34) the space is straightforwardly treated as such, and is suitably decorated with an eye-spot on a red ground. The eye is, so to speak, an artistic, not a morphological element in the design. I venture to suggest that the present series of belts partly arose from the third series as an expedient for filling in the intermediate areas; and also partly, but to a lesser degree, from the second series. From the latter it arose from a desire to utilise the triangular or hour-glass intervals between the horizontal faces

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As a general rule biserial, vertical faces looking away from one another, leave triangular spaces which are best filled by other faces looking the opposite way; in other words, Series III., 2, naturally leads to III., 3. Or the vacant spaces may be filled by geometric designs, as in fig. 35. In either case this arrangement does not lend itself to a combination with a horizontal series (Series II.), and this is probably the reason why I know of only one example of a triserial belt in which the vertical faces look away from each other. But fig. 36 also shows that such a composition is not impossible; there is no *a priori* reason why the rosettes in that belt should not have been replaced by longitudinal faces. It should be noticed that it is only by an unusual distortion of the face (*i.e.* by the lower part being much broader than the upper) that the rosettes are possible.

In the following analysis I omit all the possible combinations of vertical faces looking away from one another.

I. VERTICAL FACES LOOKING TOWARDS ONE ANOTHER.

1. *Horizontal faces looking the same way.*

No examples known to me.

2. *Horizontal faces alternately looking towards or away from one another.*

(A). *All faces of equal size.*

There are two exceptionally broad belts known to me; one in the Dublin Museum (1890, 304), and the other in the British Museum (+ 5422)



FIG. 40.—Dublin Museum (304, 1890).

in which both sets of faces are normally developed; but owing to there being more room for them the horizontal faces are somewhat the larger. In the former (fig. 40) the spaces between the faces are filled up with a pattern

which recalls those which are common on arrows (fig. 47, *d*). The bordering pattern of the latter belt is a very rare form; it may be described as a double, stepped-zigzag.

(B). *Vertical faces monopolising pattern.*

The horizontal faces of this division are subject to the same series of modifications that affect Series II, 2.

(a). *Horizontal faces separate.*

In a Berlin belt (VI., 4046) the vertical faces (fig. 41) are well marked, but the horizontal ones have become strangely modified. In the median horizontal line the large nose and nostrils can be seen between the two pairs



FIG. 41.—Berlin Museum (VI. 4046).

of vertical faces on the one side and the terminal face on the other; these horizontal faces are looking towards each other. The eyes within curiously shaped eye-areas lie on either side of the nose, but the mouths are entirely absent. Each of the triangular spaces between the nostrils of the horizontal faces, the eyes of the vertical faces, and the border of the design is filled up by a design which has no further significance than the artistic desire to fill up a blank space with a figure which is in keeping with the remainder of the pattern.

(b). *Horizontal faces looking towards one another grouped together.*

A British Museum belt (+ 5424) illustrates this variety; in it the mouths of the opposite vertical faces have joined, and, together with the coalesced eye-areas of two horizontal faces, form a row of red four-rayed figures, each containing a central eye, which results from the fusion of two pairs of eyes from the horizontal series; a somewhat similar arrangement

is seen in figs. 42 and 44. At one end of this belt the mouths of the horizontal faces have quite disappeared.

A Berlin belt (VI. 4044) exhibits a great broadening of the vertical faces, so that the edentulous mouths come to form a series of X-like figures in the centre of each of which is an eye-spot. Between each pair of vertical



FIG. 42.—Berlin Museum (VI. 4044).

faces is a well-marked toothed mouth, and extending on each side from it in the median horizontal line is a nasal line on which one can recognise conventional nostrils, which exhibit a marked tendency to reduplication. The mouth evidently has to do duty for two faces, and the eye-spot, as in figs. 32, 33, stands for two pairs of eyes.

Another variation occurs in the Dublin Museum (306, 1890). In this the eyeless vertical faces have enormously exaggerated mouths; the horizontal series has all but disappeared.

(c). *Horizontal faces looking away from one another grouped together.*

No examples known to me.

(c). *Horizontal faces monopolising pattern.*

(a). *Horizontal faces separate.*

A Maiva belt (fig. 43) in the Berlin Museum (VI. 6744) is so simple that



FIG. 43.—Maiva, Berlin Museum (6744).

it requires no description; but it should be noted that at the opposite end

to that figured the vertical faces are as well developed, and as large as the width of the belt admits of. This belt is therefore transitional between (Series V.) 2, A, and 2, C, a.

(b). *Horizontal faces looking towards one another grouped together.*

In the Edinburgh Museum there is a belt (fig. 44) in which the vertical faces are monocular, and the whole design is converted into a fairly regular pattern.



FIG. 44.—Edinburgh Museum (1890, 174).

It is by no means easy to determine whether certain belts should be placed in this subdivision or in (Series V.) 2, B, b. For example, figs. 42 and 44 are essentially similar, the only question being the relative size of the series of vertical faces.

(c). *Horizontal faces looking away from one another grouped together.*

There is a handsome belt in the Glasgow Museum (89. 67 dk) collected at Maiva by Mr. R. Bruce with a somewhat obscure pattern. It is triserial, and the horizontal faces are grouped according to this subdivision, but the vertical faces are very degraded, and it is possible that this belt should be placed in the next class as some of the vestigial faces seem to look away from one another.

II. VERTICAL FACES LOOKING AWAY FROM ONE ANOTHER.

The only belt with which I am acquainted which probably belongs to this subdivision of the series is one (fig. 45) which is in the museum of the London Missionary Society. The design is more regular and sustained than is usually the case on these belts. The horizontal series of faces is represented

by a median series of fused mouths and eyes; the chevron band indicates the nose on which nostrils may be located close to the mouth or close to the eye. The eyes of the vertical series of faces are enclosed within confluent



FIG. 45.—Museum of the London Missionary Society.

eye-areas; the median nose-line runs to the border pattern of the belt, but there is no trace of a mouth. The border pattern is, I believe, unique on belts.

Unclassed.

Besides the foregoing and several others known to me which fit into the above classification, there are a certain number of belts in which the design has become so obscure that it would be hazardous to attempt to classify them at present. I think I can trace an animal form on a belt in the Dublin Museum (305, 1890), and a man and a lizard (?) are represented on either side of the middle line in the centre of a belt belonging to my friend Mr. W. Saville Kent; but such representations are extremely rare.

Other patterns have certainly been derived from or suggested by the human face; others, again, do not appear to have had this origin.

V. Various Implements.

DRUMS.

The drums, *aopa* or *apa*, from this district, are slightly constricted towards the middle; there is a central handle and well-marked toothed jaws, which are keeled in the median line for a greater or less distance, the keel may be only a short prominence on the snout, or may extend from its tip to the handle. The attachments of the handle are generally continued round the drum, as two slightly raised bands, which may conveniently be

termed "handle-bands"; sometimes there is only a band cut into, and round, the body of the drum opposite to, and of the same size as the opening of the handle. The tympanum may be simply cemented on, or a plaited cane band may be added. They average about 635 mm. (25 in.) in length.

The drums may be perfectly plain, except for a very simple pattern on the handle-bands. The tooth-like notching of the jaws is often picked out in white, and there may be a simple band ornament round the jaws. An example of such a drum occurs in the Dublin Museum (315, 1890); another plain one is in the British Museum (+ 5640).

In some drums not only are the handle-bands decorated, but the anterior end of the drum (that is, from the tip of the snout to the nearer handle-band) is covered with ornament. The design may be simple, or very rich. An example of the former is seen in Pl. VIII., figs. 133, 134. This drum was exhibited in the Melbourne Exhibition of 1888. I sketched it in Torres Straits the following year, when it was on its way back to Mr. E. G. Edelfeld, in New Guinea; the thereomorphic character of the decoration is quite obvious.

I have recently seen a drum with a central countersunk band and serrated jaws, which was quite plain, except for four small human faces carved, one at each angle of the jaws, and one on the upper jaw behind a very short keel, and one on the lower jaw behind a longer keel; the border of the jaws was further decorated with a looped (similar to fig. 46 *i*), and a toothed pattern.

There is one rather similar to this in the British Museum, but more fully decorated; the faces on the snout are large and elaborate, but there is only an eye-spot at the angle of the jaws.

I have photographs of other drums in which the decoration is much richer than in these, but it is of the same character.

There is a model of a drum in the Dublin Museum (329, 1890) from this district, which is used in connection with certain ceremonies. It has no handle; the jaws are relatively much larger than in real drums, and it is more covered with decoration, which is in the style of that of the dance masks. It is made of the same material as the masks, and measures 940 mm. (3 feet 1 inch) in length.

TOBACCO-PIPES.

The bamboo tobacco-pipes (*kika*) from this district are readily recognisable; the pattern is formed by removing the outer skin of the bamboo, and the shallow depressions thus formed are filled in with a reddish-brown pigment, which forms a pleasant contrast to the yellow ochre-coloured bamboo. The design either occupies the centre of the pipe, a band in the region of the hole for the bowl, or extends nearly half-way down, beginning from one end. In one pipe in the British Museum (+ 2483) a representation of the sail of one of the large trading canoes, or *lakatoi*, surrounds the hole in which the bowl is inserted. In a specimen in the Cambridge Museum a permanent bowl occurs, formed out of the end of a minute coconut, and cemented on to the pipe with a kind of gum, into which red seeds are stuck. Only one other example of a similar bowl known to me (Pl. x., fig. 153). The pipes vary in length from about 650–910 mm.

In the *latakoi*-pipe, above referred to, the central design consists of an irregular lozenge with concentric lines, and enclosing a broad four-rayed star. The execution of this pipe is poor.

The usual type of pipe has intricate, but symmetrical designs, which are extremely pleasing. In the less modified examples, as, for instance, in a pipe in the British Museum (+ 2493), and which Mr. Partington has sketched ("Album," pl. 318, No. 4), traces of human faces are easily recognisable, the intervals between them being filled up with fairly regular designs. But in other cases all semblance of its human origin is lost, and the pattern consists of apparently meaningless, irregular figures which form an incomprehensible, but at the same time symmetrical design.

Two pipes in the Cambridge Museum (o. III. 94. 42–43) are adorned with human figures, the interspaces between these are filled up with rounded, or even oblong spirals, the central terminal band of which is usually furnished with a row of short lines.

There are two pipes in Rome from *Kerräma*, collected by Dr. Finsch in 1882. One of them (34949) has a band of ornament, 360 mm. broad at the open end; it consists mainly of two rows of conventional human faces

bordered by bands of elongated ovals, such as sometimes occur on arrows. This pipe has two bowl apertures, respectively, 180 mm. and 293 mm. from the blind end, the pipe itself is 910 mm. in length. The second (33707) is almost entirely covered with a simple design of pairs of eyes enclosed in oval areas, which have zigzagged sides; these are placed within bands which run round the pipe (Pl. VIII., fig. 119).

In the Glasgow Museum there is a pipe (89. 77. ci) in which the design is on the upper side, and close to the small hole; it consists of a figure with a large face, the hole is in the mouth; two pairs of limbs can be made out.

There is a pipe in the Leiden Museum with a pattern carved on it somewhat similar to figure 48 *b* and *f*, but there is an eye at the base of each triangle above its stalk, and the oblongs are evidently mouths.

The other pipes that are known to me exhibit varied decoration, but nearly always retaining traces of a human original.

A pipe from "Elema," in the British Museum (+ 5439), has a large figure of a lizard with a tail ending in two fringed scrolls, and there is a band of similar scrolls at the open end of the pipe. The hole for the bowl is in the head of the lizard.

Other small objects made of bamboo, such as lime receptacles, are carved in a similar manner, but often the carving is deeper.

COCONUT CHARMS.

Characteristic of this region are charms made of a small ovoid variety of coconut, so carved as to represent a grotesque head of some animal (Pl. VIII., figs. 124, 125). Of the three "eyes" of the coconut, two are left to represent the nostrils of the animal, while the third is cut away, together with a slit-like portion of the nut to make its mouth, the edges of which are often serrated for teeth. A pair of large eyes, and supplemental interstitial carving completes the object; the rounded end of the nut is either left plain, or it is indifferently carved (Pl. VIII., fig. 125), and this portion is encased in a small netted bag, out of which the face projects (Pl. VIII., fig. 124). The charms average about 125 mm. in length.

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These charms, *lakakare*, or *daka-kare*, are frequently extremely well carved, sometimes the execution is rough, and occasionally the face is not represented. I am unable to say what animal is intended to be indicated, the snout certainly looks like that of a pig, but no tusks are ever represented, and the jaws often have a reptilian or crocodilian aspect. All I can find out about their use is that they are carried about by the men in larger bags as charms. The hair which is found in many of them is said to be pubic hair, and it also is stated by others that the netted bag carried by the men contains an object which women are not allowed to see. Mr. Chalmers informs us that the *lakakare* are "charms to keep off evil spirits, and bring good-luck."

COCONUT SPOONS.

Coconut spoons, *arisa*, with carved and perforated handles also, come from this region. The upper part of the handle is intended to represent a face, and the rest of the design is very characteristic. The best example known to me is in the Glasgow Museum (89.77. cs). We may, perhaps, see (Pl. VIII., figs. 120, 121) below the face a body, and two arms, in which case the lower eye-like spot would be the navel. Two more simply carved spoons (Pl. VIII., figs. 122, 123) are in the Cambridge Museum (o. III. 89. x. 4, and 4, a). Similar but less elaborately carved spoons are obtained from lower down the coast. A finely carved specimen in Rome (33423) is labelled "Port Moresby"; it may have been bought there, but it was certainly carved in the Papuan Gulf District, except for the absence of the two elongated lateral perforations this specimen is very similar to fig. 120, Pl. VIII.

"Sitting in front of me" (writes Chalmers, from Motu-Motu*), "is a man busily engaged in carving a spoon made from the shell of the coconut, and his only tools are a small shell, and a piece of flint brought from the East." In Vailala he saw another spoon made by a man: "His only instrument is a piece of fish-skin, which he has on a stick, and uses as a file."†

* "Pioneering in New Guinea," p. 48.

† *Loc. cit.*, p. 74.

FOREHEAD DISCS.

When decked out in their finery the men frequently wear by their ears or on the forehead a rounded or oval white shell disc, to which is attached a film of turtle-shell cut into an elegant perforated design, it is called *toratora*. The general character of the pattern will be seen in Pl. VIII., figs. 126, 127, which are taken from two specimens (87. 30. q) in the Glasgow Museum. The details naturally vary in nearly every specimen. In fig. 1, pl. IX. of vol. XIX. (1890) of the "Journal Anthropol. Institute" will be seen one as worn by a Motu-Motu dandy; the illustration is taken from a photograph in my possession (*cf.* also "Album," pl. 308). Mr. Partington has also drawn a similar ornament ("Album," pl. 304, No. 3), which is stated to have come from "Mauat"; but I have no doubt as to its having originally come from the Toaripi District. These ornaments occasionally find their way down the coast, and there is one in the British Museum which is precisely like the typical Freshwater Bay specimens, which is labelled as having been obtained by H. M. S. "Rattlesnake" at the Louisiades. Of course it may have been obtained there, but I suspect that the collector made a mistake in so labelling it, and that most likely it came from Redscar Bay.

There is also in the Glasgow Museum an ornament (89. 67. cl.) which, so far as I am aware, is unique. It consists of a sub-circular disc of pearl-shell, 118 mm. in diameter, with a perforated pattern (Pl. VIII., fig. 128). It is stated to have been obtained in Motu-Motu in 1886. There is more system in the design than appears at first sight in the figure.

COMBS.

On Pl. VIII., fig. 135, will be seen a drawing of one of the peculiar three-pronged, carved, wooden combs of this district; it was given to me by Mr. Bruce, who obtained it at "Maipua, Panaroa River," in 1890. It is 295 mm. in length along the bend, the latter is at an angle of 140 degrees; the end is decorated with white feathers, and two brown quills.

Mr. Partington has sketched a British Museum specimen (+ 2479) in the "Album" (pl. 303, No. 2).

ARROWS.

The use of the bow and arrow extends from the west over the whole of this district, but so far as I can discover they are not in general use below Hall Sound. Bishop Navarre (1887, p. 286) describes the bow and arrow of the latter region. Moresby found them as children's toys at Redscar Bay, which appears to be their most southern limit.

Chalmers says that "the bow and arrow are chiefly used in fighting, sometimes in fishing and hunting the wild pig." The bow, *apo* or *apu*, is made of palm-wood (areca palm (aréquier), according to Navarre), the ends usually have band patterns carved on them similar to those on the arrows; the string, *mauru*, is of split ratan. Chalmers states that the bows are not made by the Toaripi, but come from Namau, about Bald Head.

There are two kinds of arrows—(1) with bamboo points; (2) the other with wooden. The former, *nae*, are of about the same size as the latter; the bamboo points are inserted into a piece of palm-wood, and made fast by a considerable quantity of plaited cane, which is often smeared over with gum or wax; the palm-wood is fastened in the same manner as the heads of the other arrows.

The other arrows, *farisa*, average about 1550 to 1800 mm. (5 ft. 1 in. to 5 ft. 11 in.) in length, and consists of a reed, into the upper end, of which a heavy palm-wood head is inserted; the exposed portion of this averages 400 to 460 mm. in length. A plaited cane band, 40 mm. wide, makes a firm joint between those two. The upper third of the head is cut into backwardly, projecting barbs on one or both sides, or into a series of cones within cones; about the middle there is a carved band of varied pattern. The whole head, including the plaited band, is usually smeared with creamy pink ochre. Of course the shafts are not feathered, and are unnotched. Navarre describes the Hall Sound arrows as being "of reed, to the extremity of which they fix a small dart of areca wood, sharply pointed, and sometimes serrated."

Out of a large number of rubbings of carved bands I have selected twenty which give a very fair idea of the variety of patterns there

employed. Except where otherwise stated, all these specimens are in the Cambridge Museum. These may conveniently be arranged in three groups.

In fig. 46 we have a variety of simple patterns. In *a*, the band is divided by transverse (longitudinal to the arrow) lines, at right angles to

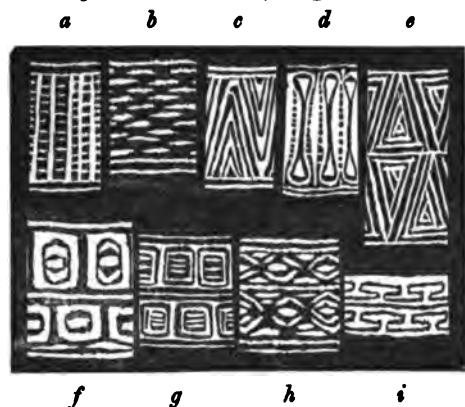


FIG. 46.

Rubbings of Patterns carved on Toaripi arrows.
One-third natural size.

- a, b, d*, . . . Cambridge Museum (o. III. 94. 45, Q, G, M).
c, e, h, . . . British Museum.
f, g, i, . . . Cambridge Museum (o. III. 94. 45, O, H, P.)

which are numerous notches. In *b*, similar notches are arranged in quincunx. Simple concentric zigzags or triangles occur on two examples (*c* and *e*) in the British Museum, and a third, *h*, has a pattern which suggests copying from plaited work; a similar pattern occurs on a club (Pl. VIII., fig. 130). I have also met with the looped pattern *i* on the jaws of a drum from this district, and we shall meet with an analogous pattern in the Massim District (fig. 80).

The second group (fig. 47) all agree in motive, but vary in detail; the two central ones have the pattern raised, whereas it is in intaglio in the others.

There are numerous variants of the last group of arrow carvings, but they evidently are related. There can be no doubt that these patterns are human face derivatives which have been laterally compressed and vertically extended through the exigencies of a restricted space, and the difficulty of more realistic carving on such slender rods. I have already alluded to the ornament on a pipe

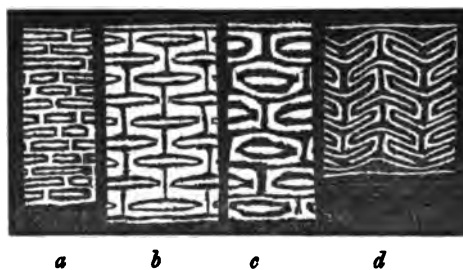


FIG. 47.

Rubbings of patterns carved on Toaripi arrows.
One-third natural size.

- a*, . . . Edinburgh Museum.
b, . . . British Museum.
c, d, . . . Cambridge Museum (o. III. 94. 45, I, A).

in the Leiden Museum, which is intermediate between fig. 48 *b* and *f*, and a conventional face.

CLUBS.

The long, flat, palm-wood "clubs" *poti*, are said by Chalmers to be "bought in the Mekeo District"; they have been stated to be employed in the preparation of sago. The process of sago extraction is described by Bevan (p. 143), and Lindt (p. 50), but the wooden adze-shaped instrument described by these authors is very different from the "clubs." They average



FIG. 48.

Rubbings of patterns carved on Toaripi arrows in the Cambridge Museum (O. III. 94, 45, E, D, L, K, B, C). One-third natural size.

in length from about 1270 mm. to 1395 mm. (4 ft. 2 in. to 4 ft. 7 in.). The upper edge is rounded, or with a blunt point; the head or blade, which is usually carved, extends for about the upper third, and is only slightly wider than the shaft. The commencement of the shaft is generally indicated by broad, short, lateral projections or shoulders (Pl. VIII., figs. 129–132). Below this the design very frequently terminates in a downwardly pointing chevron. There is often a simple band-pattern carved at the butt end. The design is sometimes emphasised by the background being painted with white lime; three of these implements are sketched on plate 275 of the "Album"; the designs on Nos. 1 and 2 are shown in more detail on Pl. VIII., figs. 130, 131.

The ornamentation in what are probably the more typical examples consists of a human face (Pl. VIII., fig. 132), below which are a series of usually concentric geometrical designs. The human face may all but disappear as in Pl. VIII., fig. 129, or may be entirely absent; the face (Pl. VIII., fig. 132) on a club in the British Museum (+ 5430) may be

compared with Pl. VI., fig. 89. In both the eye-areas are eyeless; the spirals by the eyebrows occur frequently.

I cannot discover any method in the remaining portions of the designs. The details of the geometric patterns in these clubs and on those in which the face is entirely wanting (Pl. VIII., figs. 130, 131) can all be matched on other objects from the same district.

VI. The meander Pattern in British New Guinea.

A general survey of the ornamentation of this district shows that the spiral is frequently employed; it will further be observed that it occurs in connection with the human face or figure, and that, as a rule, the curves are best drawn when the human representation is least conventionalised. I suspect that the idea of the spiral arose from noticing the coil of partly unrolled strings such as those of head-dresses: (*cf.* Pl. VI., fig. 87, and Pl. IX., fig. 136). The Papuans are a tidy people, and roll up their strings and bands when putting them away.

The tendency of these artists is to angularise their designs so that concentric circles tend to become concentric squares, and circular spirals are converted into the square variety. The slightest possible simplification of the latter results in the unit of the fret or meander pattern.

The circumscribing of designs within bands is another characteristic of these people, in common with many other "savage" races. This leads to a linear repetition of a design or pattern; hence it is not surprising that in this particular district the meander pattern has been developed. So far as I am aware this and Daudai are the only localities in British New Guinea where this pattern definitely occurs. I believe that the square spiral is found occasionally in a disconnected manner on netted bags from the Central District.* Later on it will be seen that in the Massim District an opportunity occurs for the evolution of this pattern analogous to the

* *Cf.* Finsch, "Ann. k. k. naturhist. Hofmus.," III., 1888, p. 326. "*Kiapa*, Tragbeutel der Frauen im hübschen Gremuster. Port Moresby." It is also shown in one of the admirable series of New Guinea photographs taken by the Rev. W. G. Lawes.

conditions stated above, except that the people of the south-east Archipelago have a tendency towards curved and not towards angular lines; but here the scroll pattern has never, to my knowledge, developed into a meander pattern.

A club in the Cambridge Museum (Scratchley Collection, o. III. 89 × 2, *a*) illustrates in an instructive manner several steps in the elaboration of this pattern, and a belt in the Glasgow Museum (fig. 28) also illustrates attempts at a symmetrical pattern. In neither case has a true meander pattern been arrived at. We have the pattern in the making; but, as yet, it does not appear to have been isolated and repeated independently as a recognised pattern, as has occurred in Daudai (fig. 23).

No pattern has been so much discussed as has this one; in fact, there is quite a meander literature. Probably it will now be generally conceded that wherever this pattern occurs, whether in America, the Mediterranean countries, Japan, or elsewhere, it should be possible to derive it from an antecedent design. In some cases its evolution can be demonstrated, and in the others our incapacity can only be due to "the imperfection of the record"; for even such a moderately complex pattern could not, like Athena, have arisen fully developed out of any man's head.

So far as New Guinea is concerned all the published evidence we have is the allusion by Dr. Meyer to four designs which approach this pattern.* Two are on arrows from Tabi (Netherlands New Guinea; long. 138°. 30'); the others are from the back of two masks from Taraway (Bertrand and Guilbert Is. Kaiser Wilhelms Land; long. 143°). Dr. Finsch has some turtle-shell armlets from Krauel Bay, long. 144°, of which he has kindly allowed me to make rubbings. In these there are unmistakeable approaches towards the typical fret-pattern, but I have not, as yet, seen the latter actually depicted. As the art of the north-west coast of New Guinea has not yet been adequately studied we have no data as to how this suggestion of a meander pattern has been arrived at. As we have no knowledge of the art of the natives in the interior of New Guinea we cannot tell whether this pattern has travelled southwards, or whether, as I suspect, it has been locally evolved.

* "Masken," &c., figs. 1-4, p. 8.

DECORATIVE ART OF THE CENTRAL DISTRICT.

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For lack of a better term I propose to call the region from the Owen Stanley Range to the coast and from Cape Possession to Mullen's Harbour (lat. 10° 25' S., long. 149° 50' E.), the Central District.

At the back of this district lies the lofty range of mountains which forms the backbone of the peninsula, and which extends more or less continuously right into the centre of New Guinea. The late volumes of the Journal of the Royal Geographical Society contain several references to the exploration of the Owen Stanley Range, and J. P. Thomson (1892) devotes one chapter (pp. 88–113) to his "modest endeavour to describe the particulars of the brilliant success attending Sir William Mac Gregor's ascent of Mount Victoria."* It may be as well to warn readers of Mr. Thomson's somewhat gushing book that only the two central men in the figure on p. 95 are "native mountaineers"; the two end men are coast natives, who acted as decoys.

* According to the Admiralty charts and other maps this mountain has long been known as Mount Owen Stanley, and one fails to see any adequate reason why Sir William Mac Gregor attempted to re-name it.

Nearly every one who has written on British New Guinea has described the scenery and physical conditions of Port Moresby or other parts of this district. It will be sufficient to point out that its drier climate, hilly character, and the definiteness of its rivers, form a contrast to the humid, luxuriant swamps of the Gulf District.

I have found great difficulty in dividing this district into subdivisions owing to the carelessness of collectors in not sufficiently labelling their specimens. Mr. A. Goldie informed me, when I had the pleasure of visiting him at his home in Cumbrae, in the Firth of Clyde, that the coast natives, more particularly the Motu, and Kerepunu, and allied tribes, do not make many of the objects which they trade to travellers, but that these are made and decorated by the more inland tribes. Fortunately there are some bamboo-pipes, with definite localities, Kabadi, Kupele, Koiari, and Sogeri in the Berlin Museum, and these, together with a Sogeri pipe in the Cambridge Museum, present us with most of the patterns on objects stated to come from "Port Moresby" and "Kerepunu," and also of the majority of the designs which are tattooed on the women of the Motu and allied tribes.

The following is a tentative division of the district into regions:—

- I. **Maiva**, . . . From Cape Possession (lat. 8° 30' S., long. 146° 25' E.) to about 10–12 miles down the coast. [Maiva District, lat. 8° 12' S., long. 146° 26' E.]*
- II. **Mekeo**, . . . The country round the Paumumu (St. Joseph River).
- III. **Roro**, . . . North of Hall Sound, including Yule Island, and probably the Naara Tribe, South of Hall Sound. [Hall Bay, lat. 8° 46' S., long. 146° 35' E.]

* All these positions, including the districts within square brackets [], are from a table of "Approximate Geographical Position of many of the Islands, Bays, &c., of Southern New Guinea," p. 56. Further correspondence respecting New Guinea [C. 5883]. 1890.

- IV. **The Hill Tribes**, Kabadi, (Redscar Bay, lat. 9° 6' S., long. 146° 50' E.) Doura, Koitapu, Koiari, Kubere, Sogeri, and other inland tribes.
- V. **Motu**, . . . Loyalupu (Hula and Kerepunu) and Aroma, an immigrant and coast population, extending from Redscar Bay to Chesunt Bay (lat. 10° 6' S., long. 148° 20' E.)
- VI. **Mailu**, . . . Including Cloudy Bay (lat. 10° 7' S., long. 148° 45' E.) and Orangerie Bay (lat. 10° 25' S., long. 149° 50' E.)

I do not pretend that these six groups have an equal value; Maiva and Mekeo should, perhaps, be classed together as transitional between Toaripi and the Hill Tribes, and Mailu is probably closely allied to the latter.

I.—Maiva.

The Maiva Region is very largely intermediate in character between the Toaripi (Elema) and the more typical Central Regions; but it is probably best to class it with the latter; the artistic and linguistic evidences will be given in due course. A very important argument for strong Papuan Gulf affinities is supplied by Chalmers, who refers to "the Maiva *kaevakukus*, who look like walking haystacks with large masks on the top" (1887, p. 50). This appears to be the most southern limit of dance masks in British New Guinea. Large oblong shields and carved wooden belts, similar to those which I have previously described at some length, have also been stated to have been obtained from this region.

I think we may regard the Maiva Region as marking the most northerly point of British New Guinea colonised by the non-Papuan immigrants (*cf.* the General Conclusions at the end of this Memoir). The Motu trading fleets, however, voyage for a hundred miles further to the westward.

As there is always some uncertainty in determining the affinities of intermediate groups, I should not be surprised if later writers prefer to class the Maiva folk with the Gulf natives.

In the more recent maps the Kivori (or Kevori) tribe are placed on the south-eastern flanks of the Cape Possession range, and the Maiva tribe are four miles further down the coast. The villages of Iriauna and Kivori belong to the former, and Rorokokina, Rororoaiera, and Arabukupuna to the latter. I shall term them all Maiva, as it is not easy for me to distinguish between them, though I am aware that there has been a very ancient feud between the Maiva and Kivori which Mac Gregor has now amicably settled. (C. A. 1, 1892, p. 19).

The Maiva people "are taller and half a shade darker than the Motu, and have no hair on their faces, which are larger and somewhat coarser-looking. Their noses are long, slightly distended at the nostrils, and rounded at the apex . . . The cheekbone is conspicuous, the mouth large, ears small . . . the lobe of the ear is artificially elongated in several of the men, by wearing ear-tubes (not rings), as much as $1\frac{1}{4}$ inches in diameter, made of a leaf . . . They excel in fine network, and when in mourning wear three or four net collars" (Stone, pp. 186, 187). Stone, however, does not distinguish between the Maiva and Roro, but the account partially above quoted appears to be descriptive of the Maiva proper.

Chalmers (1885, p. 135) informs us that "The natives are a fine strong healthy race, resembling much the Hood Bay and Aroma natives, and there are crowds of children. They have good large houses, kept wonderfully clean . . . nicely kept flower-gardens. The largest houses are built to represent an alligator with open mouth; the platform in front of the house is the lower jaw, and the long shade over the platform the upper, so that standing on the platform you stand in the alligator's mouth, the house sloping to appear as a body. One house, to be used as a temple in one of the inland villages, was about 150 feet long, very high, with carved posts, and in front overhead a beautifully decorated shade, with long pendants of different kinds of leaves." A similar *dubu* is referred to on p. 185: "All the posts are named, and each chief has his own particular post. A large front post, with a well-carved alligator, done by Oa shortly before his death with a tomahawk I gave him, is named Tamate. . . . Overhead, just inside, are six large frames, all covered with feathers of

various kinds. These are sacred to the spirit, and must never be looked upon by women, young unmarried men, or children" (*cf.* also Gill, 1885, pp. 271–275). Elsewhere (1887, p. 270) he says the Maiva "were a little different from the Motu natives, being physically larger, with hair not as bushy, and more respectably dressed."

Chalmers relates some interesting missionary experiences at the villages of Kivori and Maiva (1887, pp. 241–244); a feud between Boera and Maiva (pp. 272, 273), an account of a Maiva chief (pp. 270–274) and sorcerer (pp. 310–318).

"The Maiva district has a large population, with apparently abundance of food of every description. The people are kind and friendly disposed towards strangers, and intelligent; the men are full of conceit, and pay great attention to their scanty attire. Many are handsome, and have an aristocratic bearing. The women, who have sharp, masculine features, and much tattooed, are less pleasing than the men . . . A young girl is tattooed all over her body, with the exception of her face, which is left to be done when she is married" (Edelfeld, p. 131). The marriage customs are described; unlike other parts of the coast, a Maiva woman is allowed to retain her ornaments and hair when she marries.

I have seen a few bamboo-pipes which my friend, Mr. R. Bruce, told me he obtained at Maiva, or Kerräma. The patterns were burnt on the rind of the bamboo, as is characteristic of the Central District, and not engraved in low relief, as obtains in the Gulf District. As Kerräma is about fourteen miles north-west of Motu-Motu. I suspect these objects must have come from Maiva. The illustrations on Pl. ix., figs. 136–139, which are taken from sketches I made when in Torres Straits, and which were not then intended for publication, show an interesting mingling of designs. This is the last spot where we find animals' forms employed in ornamentation, until we arrive at the Massim District.

One pipe (Pl. ix., fig. 138) is decorated with two heads of hornbills (*Buceros*), in one of which the "horn" is omitted from lack of room (Pl. ix., fig. 139). Another (Pl. ix., fig. 136) has an elegant band-pattern formed of lizards, separated by what appear to be conventionalised waistbands (*sisi*), below which are what I take to be feather head-dresses, with

their coiled strings, similar to those which are sometimes carved on the Elema shields (Pl. vi., fig. 87). A third pipe (Pl. ix., fig. 137), which is now in the Glasgow Museum (89, 67, dv.), labelled "Kerräma,"* has a panel in which is present a representation of a lizard and of three birds, which are probably Mound-birds (*Megapodius*).

The concentric character of some of the ornamentation (Pl. ix., figs. 140–142), and the employment of fringed lines, is also common to the Gulf and the Central Districts. The crossed panel (something like an Union Jack) (Pl. ix., fig. 140) and the plant-like design, shown in Pl. ix., fig. 141, are, however, peculiar to the latter district.

I do not know the locality of a bamboo-pipe in the Edinburgh Museum (1885–91). It is covered with a burnt-in pattern, which is practically a repetition of the design shown in Pl. ix., fig. 150. I suspect it is either from Maiva or Kabadi.

II. Mekeo.

I adopt this name for the country drained by the Paumumu (St. Joseph River). MacGregor has established a Government Station at Mekeo (near where the Paumumu crosses lat. $8^{\circ} 30'$, *i. e.* at long. $146^{\circ} 37'$), in the heart of this very populous and fertile region. He apparently intends to employ this designation for that district (C. A. 1, 1893, p. 15).

E. G. Edelfeld, who has lived many years in British New Guinea, contributes a chapter on "Travels in the neighbourhood of Mount Yule" to Lindt's "Picturesque New Guinea" (1887, p. 126), in which he gives an account of the Mekeo people and their country, when he first visited them in 1884, and from which the following notes are extracted:—"The betel-nut is chewed, and at Paihana, a few miles north of Hall Sound, the men carry a bark blanket on the shoulders, on which they sit. Near Nauea † is a regular market-place, where three or four tribes

* As Mr. Bruce had expressed his uncertainty as to the exact locality of these objects a year previously to his liberal donation to the Glasgow Museum, I have the less hesitation in provisionally assigning this pipe to Maiva rather than to Karama.

† Nauea is stated by Edelfeld to be a short distance east of the Hilda River; but the river he crossed is probably the Paumumu (St. Joseph River). I cannot find this village marked on any map.

meet on certain days to barter. The people here are of a small stature, healthy, industrious, clean, and orderly, well fed, and mostly of a light colour, even as light as many half-castes of a Tahitian origin, with bright, intelligent faces. Tatooing was not much practised, and the string used by the natives at Port Moresby and in the Astrolable ranges, is dispensed with here, and replaced by a wide fibre cloth, fastened like a suspender at the back, terminating in a long pendant, ribbon-like tail. The women wear a short petticoat, dyed black, and seldom more than one . . . at every house I saw hammocks made of bark cord, on the same principle as our European hammocks" (p. 129). "Fowls* cooped up in true European style are kept merely for the feathers of the male, which are particularly bright, and used for ornaments; they are similar to the Malay fowls, with the exception of being a shade bigger" (p. 130).

A very interesting account of the Mekeo country is given by MacGregor.† Maino, the chief of Aipiana (lat. 8° 32' S., long. 146° 34' E.), is described as being "thin, active, of a brownish-yellow colour, broad-faced, with rather prominent cheek-bones, and he wears whiskers and a beard." "In all the villages there are at present [first week in May] great strings, sometimes containing thousands, of sprouting coconuts, to be used when great feasts are given. In nearly all the villages there is a pulpit-like erection in the square made of coconut leaves, with long bamboos projecting from it with streamers of painted native cloth; this is a tabu, that no one is to touch these coconuts. A tabu is put on the trees at Aipiana by a procession of four men in masks going along the public square early in the morning. They had the head and body completely enveloped in a garment of native-painted cloth, shaped like a lady's well-fitting jacket, with short flaps, but with something added to each side which projects like a wing, and in which I presume were the arms; the skirt was made of banana leaves, the upper end fastened to a girdle; the outline at a little distance was exactly that of

* Dr. H. O. Forbes informs me that there are no fowls in the Port Moresby region, though in Milne Bay he saw a beautiful bantam-like cock of a species unknown to him, which the natives would not part with. It was said to be native. Where do these fowls come from?

† C. A. 1, 1890, pp. 76-83; or, C. 6323, 1891, pp. 150-161. Cf. Abstract, Journ. Anth. Inst., xxi., 1891, pp. 201-204.

a woman in a skirt and jacket. At Maiva this tabu was declared by a man eliciting tremendous shrieks from a syren just outside the village." The coast-tribe women wear petticoats down to the knees, similar to those at Port Moresby, but the inland women wear short petticoats from six to nine inches long.

Some of the tribes of the Mekeo country, especially the Inawaia tribe, have recently given a good deal of trouble, and MacGregor gives an account of how he quieted them.*

I have not seen any objects labelled from this region, and so cannot be sure with what other artistic province it should be classed.

III. Roro.

We may conveniently adopt the name of Roro or Lolo for the small region round Hall Sound (Hall Bay). According to Chalmers it applies to a small tract of territory north of the bay, and round the Erere, and Arabure (Ethel) Rivers. These rivers open by a common mouth, Bioto River, at the fundus of Hall Sound, according to the map prepared by the missionaries of the Sacred Heart (1887, p. 342), and a Government map (9th June, 1890). A very much larger river, Paumumu, or Angabunga (St. Joseph River), lies a little to the west; its delta occupying the north side of the Bay.

Yule Island, also called Roro or Lolo, is a fertile island four and a-half miles long, by about one mile broad. The position of the Mission Flagstaff is lat. $8^{\circ} 50' 25''$ S., long. $146^{\circ} 31' 50''$ E., or about forty miles from the village of Motu-Motu, and fifty-two miles from Port Moresby in a direct line.

Chalmers locates the Naara tribe (1885, p. 166) in the country to the south of Hall Sound, the French missionaries term it the "district of Roro." At all events we may regard them all as practically one people (*cf.* Chalmers, 1885, pp. 166-191, 271). We have some interesting facts about the Roro in the book edited by Jouët (1887), especially in

* C. A., 1, 1893, pp. 15-22. *Cf.*, also, C. A., 1, 1892, pp. 19-21.

Chap. XXXII.: "Manners and Customs of New Guinea. First notes sent by R. P. Navarre, 'Supérieur' of the Mission," pp. 255–311.

The first account we have of these people is by Moresby, who named Hall Sound in 1873. I quote it entirely (p. 176):—"The people here are of the Malay type, but differ from the pure Malay in being less in stature, coarser in feature, thicker lipped, and having less hair on the face, being, indeed, almost beardless. They have high cheek-bones, like the pure Malay, but their noses are inclined to be aquiline, and are sometimes well formed; their eyes are dark and beautiful, with good eyebrows. The men have their hair frizzed out in a mop, but the women cut theirs short, and tattoo their bodies in graceful lace-like patterns, which the men never do. They, however, are not without adornment, for they paint with black, red, and white pigments, and wear flowers, and the plumes of the Bird of Paradise, fastened to their heads and shoulders, and occasionally two great beaks of the hornbill, as horns on the head. They were much disfigured by constant use of the betel-nut. Unlike the Port Moresby natives, they are possessed of bows and arrows, of spears, and clubs of wood and stone, and they seemed to us to be less kindly disposed than the Port Moresby people. They are equally ignorant of the use of iron, and no sign of cannibalism was visible at either place. This race abuts on the black Papuan, somewhere in the vicinity of Cape Possession; but I do not believe that a fixed line of demarcation exists, for here both types of race were present, and the natives varied in colour, stature, and cast of feature. A mixture of habits also obtained here, which confirmed the idea of a fusion of races, for some chewed the betel-nut Malay-wise, whilst others rejected it; some wore the specially Papuan adornment of the great bill of the hornbeak [*Buceros*] on the head, and all were entirely destitute of the ornaments of human bone that we afterwards found to be generally worn to the eastward. It must, however, be taken into account that natives from different parts of the coast, perhaps attracted by the news of our presence, kept arriving during our stay, as this would, perhaps, account in part for the different habits and shades of colour we observed."

Other accounts of the place, and of the people in the island, and on the mainland opposite, will be found in D'Albertis, I. (1880), pp. 243–421;

[19*]

Stone (1880), pp. 18–30, 186, 205, 230; Lyne (1885), pp. 48–67; Chalmers (1887), p. 322; Jouët (1887), p. 130–161 (S. H. V.); 169–190, 196–230, 247–255 (L. C.); 255–311 (R. P. N.) (letters from Bishops Navarre and Vérius, and Father Couppé; Mac Gregor, C.A., 1–1892, p. 19).

There is a general agreement that the population is a mixed one. D'Albertis says: "The colour of the skin varies from nearly black to the yellowish tint of the Chinese," p. 260; more details of the extreme types are given on pp. 411, 412, and he adds:—"We may, therefore, conclude that the present inhabitants of Hall Bay are a mixture of two races, one dark-skinned and crisp-haired, the other with lighter skin and smooth hair." The lighter people are admitted to be good-looking. "I have found among them types which would be admired in Europe. The lips are neither large nor turgid; the nose is often straight or aquiline, never turned up and flattened; the cheek-bones slightly prominent" (Vérius, p. 158). Navarre (p. 261) emphasises the European appearance of some of the people. He says:—"The men are big and generally well-made; they belong to the Malay race, but one also meets there all the types of the Caucasian race; the Roman type, the Greek type; large brow, flat face, facial angle of nearly ninety degrees, straight nose; the French type, round, or slightly oval face, straight or aquiline nose. However, many have a lower facial angle ("plus resserré") than that of the Caucasian race."

Bishop Navarre continues (p. 262):—"It is difficult to say if all the people of New Guinea belong to a single race, or to several distinct or mixed, for we notice how a combination of causes modify types. At Roro they are generally idle, indolent; the principal fruits of the earth do not come without culture, and the poor savages then often want the where-withal to appease their hunger. Also they are generally thin, their height is below the average, they lack strength and vigour. At Motu-Motu, a village twenty-five leagues to the west along the coast, the country is unhealthy, it is built almost in the water in a swamp, and much less favourable to health than Yule Island. Yet the men and women are more robust, taller, more bulky, more active, very petulant; their language

expresses their temperament. It is true that it is not the same as at Roro. Whence comes this variation, when the remainder of the customs is exactly the same as at Roro? It is that this swampy country produces of itself, and in abundance, sago, coco-palms, bananas, without much cultivation; the river abounds in fishes. And this substantial food has made a people vigorous, strong, and renowned as warriors."

"If, on the contrary, the swampy country does not produce this food, the inhabitants fade, and at each change of monsoon they die in great numbers, after a time the survivors sometimes abandon the village in the belief that some evildoer has cast a spell over the village, or that the evil spirit has resolved to destroy it. Finally, the inhabitants of the mountains are more robust than those of the plain. It is then quite as difficult, considering several matters, to decide upon race as upon customs."

I have quoted Navarre at length, as he shows from his observations on the features that this is a mixed race, although one can hardly go to the length of admitting Caucasian traits. His comparison of the Roro with the Motu-Motu is interesting, and the effect of environment and aliment are important in modifying people, but it is to my mind somewhat doubtful whether this is the only factor. I suspect the racial question also comes in.

A foreign element is also proved by the fact that pottery is made on the island (Navarre, p. 304), and at Delena on the mainland (Chalmers, 1887, p. 24). Other places in British New Guinea where pottery is made are Manu-Manu, in Redscar Bay, Lealea in Caution Bay. The Motu tribe, especially at Boera, Borabada, Port Moresby, and Pari; the Aroma tribe chiefly at Maopa, and lastly on Teste Island, and in the Engineer group (Chalmers, p. 23), but in these islands it is manufactured in a different manner, the clay being laid down in a spiral, and no stone and beater are used. Mac Gregor also states that pottery is made in several of the island groups of the Massim District:*

"Tattooing is practised among them. The women have nearly their whole body covered with marks, the men frequently have marks on the

* Cf. "Album," pl. 310; the observations by Finsch, "Töpferei in Neu-Guinea," *Zeits. für Ethnol.*, xiv., 1882, *Verhandl.*, p. 574; and in "Samoafahrten," p. 281, and figure on p. 280; also pl. iv., figs. 6-10, of his *Ethnol. Atlas*; as well as Forbes' description.

chest or shoulders, they occur very rarely on the face" (D'Albertis, p. 419). Lyne informs us: "The women and girls were tattooed to only a small extent, and therefore differed in that respect from the women of Port Moresby (p. 55); but, near Cape Suckling (lat. 9°), Koloka, queen of the Naara tribe, was "plentifully tattooed" (p. 59), and a man at Delena (lat. 8° 36' S., long. 146° 25' E., on the south side of Hall Sound, opposite to Yule Island), the principal village of the Naara tribe, "was liberally tattooed, many of the marks being indicative, it was said, of the number of enemies he had killed" (p. 64). Finsch's account of the tattooing in this district will be given later on. Stone gives a figure (p. 79) of the tattooed face of a Roro woman.

Chalmers (1885, pp. 166, 167) describes a visit to the village of Tobokau, ten miles inland from the coast, at a few miles east of Cape Suckling (*i.e.* to the north of Redscar Bay); he speaks of the people as being of the Naara (Nala) tribe. On the occasion of a grand feast "a few had hats seven feet high, a wooden frame, one mass of feathers and plumes. Some had large pieces of native cloth beautifully marked, like tartan" (p. 167). I suspect that it was from here that a piece of tapa in the British Museum was obtained (Pl. x., fig. 160).

The only collection of objects from Yule Island, known to me, are the specimens brought home by D'Albertis, and which are in the Museum in Rome. Concerning their art, that distinguished traveller says:—"They also ornament articles of use with fine carving; and the forks, made from the leg-bone of a cassowary, with which they eat fish, are most admirably carved. Even the little sticks for conveying the lime they are in the habit of chewing, to the mouth, are often very finely carved, and ornamented with feathers and the heads and legs of birds, and with teeth, shells," &c. (i. p. 417).

An inspection of Pl. ix., figs. 143-147, will at once demonstrate the paucity of artistic feeling as compared with that of the Papuan Gulf natives. The patterns are composed of straight and angled lines; there is also a marked tendency to a concentric treatment of designs, and the zigzag line is common; it often has a square contour. Fine cross-hatching sometimes occurs, as does also punctate ornamentation.

The few ornamented objects I have seen are mostly-bone forks and lime spatulas, spoons made of a coconut-shell, and turtle-shell earrings; the latter are thin plates cut into the forms shown in Pl. ix., figs. 146, 147; they may be plain, or have simple punctate patterns.

There is in Rome (No. 2761) a forehead ornament (63 × 55 mm.) made out of turtle-shell and a rounded piece of cymbium shell. The design (Pl. ix., fig. 148) so closely resembles that which is characteristic of the Toaripi that one is tempted to suppose that it has either found its way into Yule Island from the north-west, or that some of these designs are comparatively widely spread. That this is possible is proved by the annual fleets which trade between Port Moresby and the Toaripi, and other tribes. The late Bishop Vérius informs us:—"The 16th September [1885] was the great feast of the king of the island, Rabao, or Lavao. It was the great *Mawarou* . . . These feasts give the missionary a good opportunity for preaching and making himself known, for the *Mawarou* always attracts numerous deputations from surrounding villages. . . . Among the strangers were some from Motu-Motu, a village far distant [a journey of fifty miles] towards the north [N. W.]; it is the limit of geographical knowledge of our savages. There were some even from the centre of the mountains" (p. 152). [I would like to take this opportunity of expressing my sorrow that the devoted labours of my friend should have been cut off so soon after he had won the confidence and affection of the people for whom he had so great a love.]

A lime spatula in Rome (No. 2477), cut out of the shank-bone of a cassowary, is engraved with the design shown in Pl. ix., fig. 143. Another (No. 2475) has a repetition of yet more simple panels (fig. 144). A little five-pronged fork (No. 2465) has the upper part of the handle incised with zigzags (Pl. ix., fig. 145), while a concentric, indented square occurs at the origin of the prongs.

These and similar objects are figured by D'Albertis, vol. i., p. 416.

IV. The Ethnography of the Hill Tribes.

There are numerous tribes which reside in some places on the coast, but more generally in the hilly country behind it, and right up to the flanks of the mountains. These are often at feud with one another, but we may regard them as practically one people, who were originally the possessors of all the country from Hall Sound to Cloudy Bay, and perhaps beyond to the extreme end of the peninsula.

Some of the tribes were driven inland to a greater or less extent by the Motu and Kerepunu people, who thenceforth retained command of the sea-board. Although dispossessed of some of their land, the Hill Tribes still retained their influence over the unseen Powers, and so the Motu conquerors pay substantial tribute to the sorcerers of the former owners of the soil. I believe, also, that the conquerors are largely indebted to the conquered for their decorative art; but from the very imperfect state of our knowledge this is a very difficult matter to determine, and it can only be settled by investigations on the spot.

Chalmers (1885, pp. 87–132), gives an interesting account of an expedition to various of the Hill tribes.

In the following enumeration of these Inland, or Hill tribes, I commence with the most northerly, and work southwards and towards the interior:—

1. REDSCAR BAY.

Captain Moresby writes (p. 139) of the natives of Redscar Bay:—

“We were surprised to see that these people differed totally from the tall, muscular, fierce-looking, naked black Papuans we had left in Torres Straits. These men were more of the Malay type—small, lithe, copper-coloured people, with clean, well-cut features, and a pleasing expression of countenance. They wore their own hair, frizzled out mop-fashion, and were slightly tattooed with stars and small figures on the breast and shoulders, as I have never seen the black Papuans . . . The women were ill-made and slovenly-looking as compared with the men; their dress was

the grass petticoat, but the otherwise nude body was adorned by the most extensive tattooing, well executed . . . As far as Redscar Bay [coming from the west], we saw toy bows amongst the children, but beyond that point the bow ceases altogether, till it reappears on the northern shores, west of Astrolabe Gulf" (p. 157). Macgillivray, I., pp. 293–298, also describe these natives, their canoes, bows and arrows, ornaments, &c.

2. KABADI.

The Kabadi inhabit the land at the back of Redscar Bay. Chalmers gives a graphic account of the visits he paid them (1885, pp. 155–160; 1887, pp. 98–110, 119–123; *cf.* also Mac Gregor, C. A. 1, 1892, p. 25): They, with their allies, the Doura, have blood feuds with the Koitapu. "The Kabadi people have long been notorious as a bad lot" (Mac Gregor, C. 6323, 1891, p. 10).

There is a bamboo tobacco pipe in the Berlin Museum, which is decorated in a peculiar manner. In the sketch (Pl. ix., fig. 149), it is seen that the main pattern consists of a series of concentric diamonds. In the spaces between these the most frequently repeated designs are a pair of lines ending in spirals and circles, in which a cross is inscribed, the quadrants thus formed being filled up by concentric angles. The periphery of the circle is usually toothed. It will be seen, on reference to Pl. viii., figs. 126, 127, that this design is precisely that of the tracery turtle-shell head ornaments which are characteristic of the Toaripi District. I have not seen any ornaments of this kind labelled as coming from the country of the Kabadi. I have already alluded to a specimen (Pl. ix., fig. 148) obtained by D'Albertis at Yule Island. From these facts, and the accounts given by Mac Gregor of the Mekeo, or St. Joseph River country, we may regard the latter as being a transition region between the Papuan Gulf natives and the Hill tribes of the Central District.

There is a pipe in the Edinburgh Museum (1885, 91), with a peculiar pattern (Pl. ix., fig. 150). Unfortunately, no locality is given with it; but from the presence of spirals, and the frequently recurring triangles, I am inclined to regard it as coming either from this region or from Maiva.

In his first account of the Kabadi natives, Chalmers (p. 159) says that, when they are about twelve or thirteen years of age, chiefs' daughters are kept indoors for two or three years, and are never allowed to descend from the house, and the house is so shaded that the sun cannot shine on them. At the termination of the seclusion a great feast is held, and the girl presents her beau with a betel-nut.

3. DOURA.

The Doura (Chalmers, 1887, pp. 91-98) are a small tribe that has suffered much at the hands of its neighbours, the Motu, Kabadi, Manumanu, and the Mountaineers. They live on the Veimaui (Edith River). MacGregor (C. 6323, 1891, p. 9) describes the chief as a man "with a decided Semitic face. The Oriental cast of features was common to the tribe generally, what I have subsequently found to be characteristic of the tribes of the interior in this part of the country. Their language, of course, differs widely from that of the coast people nearest them. They are very lazy . . . they do some trade [in small bundles of salt] with the mountain tribes; their houses were very miserable." He describes a remarkable rattan suspension bridge over the Vanapa River (C. A. 13, 1890, p. 38) which is figured by Thomson (p. 90).

4. NATIVES OF THE OWEN STANLEY RANGE.

On Mount Musgrave, one of the Owen Stanley Range, MacGregor (C. A. 13, 1890, p. 41, or C. 6323-1891, p. 18) found a people who "speak a language that has strong affinities with that of the Koiari people on the one hand, and with that of the people between them and Doura on the other; that is a Papuan dialect. They are physically stronger than the coast men, perhaps a little shorter . . . their features are decidedly good; their faces indicating more character and strength than those of the average coast men. In not a few the cheek-bones are rather broad and prominent. The nose is generally of the Semitic type; the nostrils are much less arched than is usual; and the chin and under-jaw are stronger. They possess all the volubility of the Papuan race . . . they do not tattoo nor wear nose nor

ear ornaments." Mac Gregor describes their fur caps and other articles of dress; they informed him that they used both the bow and the spear, but he never saw one with a weapon.*

H. O. Forbes† believes that the natives seen by Mac Gregor on Mount Musgrave belonged to the same tribe as those he met with at Ubumkara on October 27, 1887. These natives have broad nostrils, and the men wear a covering round their waists of short grass petticoats, from the band of which a piece of bark cloth, *augidi*, ornamented with red and black ochres, hangs down behind (Pl. x., fig. 159). In front they wear over it, if married, one or more bags, *yago*, in coloured patterns—blue, yellow, and brown. The method of their manufacture is described. In their hair are worn also tails of small cuscuses and wreaths of cassowary feathers, while round their foreheads are fixed coronets of dog and wallaby teeth and small shells. In some cases the men wear their hair in plaits, with shells or skulls of a species of fish hanging at the ends. No tattooing was observed on any of them. Their villages are very poor; the houses raised on poles are miserably built and kept; most of the men wore on their arms, or had hanging in their girdles behind, coils of rattan rope, which are used by them for making fire; this peculiar method is described, and has been copied by W. Hough.‡ Lawes§ records a similar process used by the Koiari. Their spears are of palmwood, devoid of ornamentation, and their shields have the shape and rough ornamentation seen among the Koiari.

Chalmers (1885, p. 162) describes some squalid natives from the Yule Range who visit the Kabadi to get salt and make sago. The men sleep in hammocks; the women on the floor. The women work very fine fancy garters worn by the men. "Several of the men at Iduna had shell ornaments that I knew could not be got anywhere on this coast, and, on inquiring, found they came from the other side. This is the first time I have met trade from the other coast."

* Cf. also, "Journey to the Summit of the Owen Stanley Range, New Guinea," Sir William Mac Gregor, *Proc. Roy. Geogr. Soc.*, xii., 1890. pp. 193–223.

† *Proc. Roy. Geogr. Soc.*, xii., 1890, p. 562.

‡ "Aboriginal Fire Making," *American Anthropologist*, 1890, p. 366.

§ *Proc. Roy. Geogr. Soc.*, v., 1883, p. 357.

5. KOITAPU.

The best account we have of this tribe (Koita of Mac Gregor) is from the pen of the Rev. W. G. Lawes (1879). "The Koitapu are now for the most part to be found living at one end of the Motu villages, although preserving their distinctness and separateness. They are also to be found in little groups of a few houses, a little way inland, or on a hill overlooking the sea, all through the Motu district. In physique there is but little difference between the Koitapu and Motu. The typical Koitapu man is slightly darker in colour than the Motu, though by no means so dark as the coast tribes to the west of Yule Island. The hair is frizzly, not woolly; the forehead is perhaps more receding than in the Motu. . . . The language is essentially different from the Motu and all the coast dialects. It is closely allied to the language spoken by the Koiari or mountain tribes, but differs from Malayan or Malayo-Polynesian. In a vocabulary of 250 words which I collected there are only 12 words which have any affinity for coastal dialects or Malayo-Polynesian, and these are probably borrowed from Motu, or *vice versa*." The Koitapu cook with hot-stones and by roasting; they have also borrowed from the Motu the custom of boiling in earthenware pots. Their ornaments "are distinct from Motu and coast tribes . . . The weapons used by the Koitapu are the stone club and spears. The bow and arrow is not used by them, but is confined to the coast tribes . . . The Koitapu make mats quite different to those on the coast. To them is also assigned the knowledge of making the netted bag, now common on the coast. . . . They do not know the art of making pottery. . . . There are many indications that the Koitapu are now but a small remnant of what was once a numerous and powerful tribe. The natives of both races say such is the case."

Chalmers' account of the relationship between the Koitapu and Motu will be found in the section dealing with the latter tribe. There are many allusions to the Koitabu, as Chalmers sometimes spells it in his "Pioneering in New Guinea"; they are more specially noted on pp. 110-115. A good account of Koitapu sorceries, sacred stones, charms for

wind and rain, yam-planting, and fighting, is given by Chalmers in 1887, A. pp. 58–62. The Rev. Dr. W. Y. Turner (p. 472) writes “The Koitapu may be best spoken of as nondescripts; they are a roving people living chiefly by agriculture and hunting . . . Their manners, customs, manufactures, and language are different from the Motu; they are distinct also in appearance, being of a darker shade, and more savage expression. They live upon friendly terms both with the Motu and the Koiari. They resemble the latter in many points in which they differ from the former; and it is very probable that they originally belonged to the Koiari.” Chalmers, 1885, p. 151; and 1887, A., p. 57, refers to a legend which points to a common origin for the Toaripi, the Koiari, and the Koitapu; the latter version includes the Motu also.

Romilly (1889, p. 27, and chap. v.—the latter is reprinted in “The Arch. Rev.,” III., 1889, p. 281) refers to the practice of sorcery, and gives a translation by Chalmers of magic formulas from “an almost, or quite, obsolete form of the Koitapuan dialect.”

Turner (1878, p. 487) describes a Koitapuan fire-hunt or kangaroo drive; and Romilly (1893, p. 321) gives a vivid account of one he witnessed.

6. KOIARI.

“Closely allied to the Koitapu” (writes Lawes, p. 374) “are the mountain tribes called Koiari. These inhabit the mountains at the back of the Motu and Koitapu District, and consist of a number of scattered tribes. They are inferior in physique to the Motu, and generally to the Koitapu, but are more numerous than either. They are generally small in stature, dark in colour, and dirty in their persons and habits. Their hands and feet are remarkably small. They are much more hairy than the Motu. Many of the men have beard and whiskers. They seem, however, to present great differences; some seem to resemble some of the Australian tribes; a noticeable feature in others is the hooked nose spoken of by Mr. Wallace as characteristic of the true Papuan; others have quite a Chinese appearance; while others might lead one to fancy that New Guinea was the refuge of the ten lost tribes. The villages of Koiari are built in the ridge of a hill . . . In

almost every village is one house high up on a tree . . . The Koiari, like the Koitapu, are great hunters. . . . Their language is very similar, the difference being only dialectal. They cook their food the same as the Koitapu." Mr. Lawes gives further valuable information concerning these two tribes.*

Mac Gregor says (C. A. 1892, p. 27):—"As a race they are decidedly of more sturdy build than the coast tribes, the Motuans, and Koitapuans; but the difference is apparently one caused by leading a mountain life, and not by any diversity of origin they have abundant food."

According to Stone (1880, p. 164): "The features of the Koiari differ considerably in individuals, but the colour of the skin is more uniform than among the coast tribes, and is as dark as the darkest among the Motu, and of a rich chocolate colour. Some have aquiline, and some flatter noses. In a few the eyes are *slightly* Mongolian, like those of the Siamese. Their faces are generally elongated, with prominent cheek-bones, high foreheads, black and frizzly hair, and large mouths; their lips are not so coarse as among the dark Papuan, and their chins are finely shaped; many among the elder men wear short, curly beards, moustaches and whiskers Two men differed from any we saw in the peninsula in the mode of dressing their hair; the hair of one was matted like a mop, similar in style to that of Torres Straits, and that of the other was worn in a series of small tufts, covering the head The average height of the men was 5 feet 3 inches [1600 mm.], and of the women 4 feet 9½ inches [1460 mm.]; the Koitapu, who most approach them in manners and general appearance, are about 2 inches [1550 mm.] shorter; the Motu 1 inch taller, and the Ilema 2½ inches taller. The girth round the men's chest averaged 3 feet [915 mm.] among the Koiari, and 2 feet 9 inches among the Motu." They chew the betelnut. A short account of the Koiari houses, clothing, ornaments, &c., is given by Stone (pp. 113–125, 129, 164–168). Turner says (p. 472): "The Koiari are evidently the aborigines of this part of New Guinea. . . . They are darker in colour than the Motu, and more muscular in appearance."

* Cf. also Chalmers, 1885, p. 87.

Quite recently* Mr. Chalmers has given an account of the Toaripi (Motu-Motu) and Koiari Tribes, in response to a list of questions compiled by the "Australasian and Polynesian Races Bibliography Committee." This gives us a valuable summary of the most important customs and beliefs of two very distinct New Guinea tribes in a convenient form for comparison. The following are some of the more marked differences between these two tribes.

Female Maturity.—*t.* No observances. *κ.* A feast held and spirits prayed to. "At Kabadi and Nara, girls on reaching maturity are kept indoors for a long time, well fed, and not allowed to be in the sun. When they are to go out a feast is prepared by her parents. . . . Girls also have tattoo marks made at various times, and when they are nubile, the *finale* is made between the legs and back, and then she waits until marriage, when her chest is done."

Initiation into Manhood.—For the Toaripi, see p. 108.

"In the Motu and other tribes, lads when about fourteen years old receive the *sihi* (string) . . . he is sent to his aunt on his father's side with food, pig, and arm-shells, and she ties on the *sihi*." [The only circumcision he has seen in New Guinea was on Rook Island.†]

Wizards and Sorcerers.—None among the Toaripi, "but plenty [further west] at Kerema and Vailala. The rain- and wind-makers, etc., reside chiefly at Oiapu" (to the S.E.). Descend from father to son among the Koiari.

Mourning.—Widow first plasters herself all over with river mud, and later with charcoal, and finally wears a netted dress, among the Toaripi. Juice from the body, sometimes mixed with black, rubbed over the whole or part of the body by the Koiari.

Spirits.—In both go to the West, a land of plenty. "All with a pierced nose pass into that country; hence every native has the nose pierced in childhood" (Koiari). They have no superstition about piercing the nose among the Toaripi.

* Rept. Austral. Assoc. Advanc. Sci., ii., 1890, pp. 311–323.

† "Circumcision also on the N. E. Coast."—H. O. Forbes.

A Koiari tobacco-pipe, in the Berlin Museum, is decorated in a style which is common on objects in collections bearing a "Port Moresby" or "Kerepunu" label. It will be seen on reference to Pl. x., fig. 151, that the design consists essentially of diamonds, panels, and zigzags burnt in on the surface of the bamboo.

7. KUBERE OR KUPELE.

Inland of the Koiari lies the country of the Kubere or Kupele, apparently on the south-western slopes of Mount Owen Stanley, and between the upper reaches of the Edith and Goldie Rivers, at a distance of thirty miles in a direct line from Caution Bay (lat. $9^{\circ} 5' S.$, long. $147^{\circ} 35' E.$). Chalmers in his map (1887) adopts the spelling first given. Two pipes in the Berlin Museum have the latter. As the letters *b* and *p*, and *r* and *l*, are so generally interchangeable, the difference in these two ways of spelling the name are of no consequence.

One of the Berlin pipes (vi. 4332) from Kupele is dated "Aug. 1880." It is especially interesting on account of the presence of the bowl (Pl. x., fig. 153) being fastened on to the pipe instead of being a twisted leaf temporarily inserted into the small orifice. In this case (as in a specimen in the Cambridge Museum from the Papuan Gulf), the bowl consists of the punctured end of a small coconut, which is cemented with black gum (?) to the bowl. The cement is adorned with fragments of a white shell, and edged with red seeds, which have now acquired a very dark colour. The patterns burnt on the pipe are panels intersected by diagonal, fringed lines; the triangular spaces thus formed are filled up concentrically.

The other pipe is decorated in the manner shown in Pl. x., fig. 152. The isolated, fringed, square zigzags (Pl. x., fig. 154) are interesting. I do not understand the significance of the isolated black triangles, with curved ends (Pl. x., fig. 155).

Chalmers (1885, p. 130) says the Kupele "are the same race of people as at Meroka (p. 117), some very dark, others very light-coloured. Their weapons are the same as the Koiari, so also is their dress." Men, when in mourning, wear netted vests; all have a wisp of grass hanging down behind, to serve as a seat when they sit down.

8. SOGERI.

Another inland tribe, inhabiting the lower slopes of the Owen Stanley Range, about ten miles south of the Kubere, is known as the Sogeri.

In the Cambridge Museum there is a pipe (o. III. 94. 37) labelled "Chogeri," which is evidently a variant of the name Sogeri. The pipe (Pl. x., fig. 157) is covered with a pannel-design, which is not symmetrically arranged.

A pipe in the Berlin Museum (vi. 4339) has a design on it (Pl. x., fig. 158) which is clearly allied to the designs which are frequently tattooed on the shoulder and arm-pits of the coast women.

V. Motu, Loyalupu (Hula and Kerepunu), and Aroma.

The coast population, which extends, roughly speaking, from Redscar Bay to Chesunt Bay (lat. $10^{\circ} 6'$, long. $148^{\circ} 20'$), is largely composed of one group of people living in villages along the sea-board, either isolated or in juxtaposition with other tribes which are more distinctly Papuan in race.

For the sake of convenience this fishing and pottery-making people will be grouped under the three most important tribes: the Motu, the Loyalupu (under the latter term are included the inhabitants of the littoral villages of Hula, Kerepunu), and the Aroma.

As previously stated, the objects in collections stated to have come from Port Moresby, the central and most important colony of the Motu, and from Hula and Kerepunu, in many, if not in most cases, appear to be the handiwork of the inland tribes, and thus the Motu and Kerepunu have a greater artistic reputation than they deserve. Objects from the Massim District also find their way up the coast.

1. MOTU.

More has been written about the Motu than about any other tribe of the Protectorate. The first account is by Moresby (1876, pp. 154-158). Turner (1878) and Lawes (1879) have each published on this tribe;

Chalmers (1887) incidentally refers largely to them, and devotes Chapter VIII. (pp. 162–188) to a very valuable comparison of “The habits, customs, and beliefs of Motu and Motu-Motu,” and on p. 78 contrasts the Motuans and Eastern Polynesians. Stone gives some account of them in his book (pp. 46–60, 63–66, 75–80, 88–97, 193, 203). I append a translation of Finsch’s description of their tattooing. He also gives accounts of their ornaments, weapons, etc.

Port Moresby is the most central and convenient harbour in British New Guinea. It was early selected as the head-quarters of the London Missionary Society, and as a consequence it has been adopted as the seat of the Government. It is situated in lat. 9° 20' S., and long. 147° 10' E. There are two native villages, Hanuabada and Elivara, about 200 yards distant from each other.

The Motu District extends eighteen miles to the east, and thirty miles to the west of Port Moresby, according to Lawes (p. 369); but Chalmers, in his map, makes it extend to Kapakapa, or about forty miles to the east; or in other words, from the Usborne River, in Redscar Bay, to about five miles north of Round Head.

For recent information concerning the district between Port Moresby and Hula, *cf.* Mac Gregor, C. 5883, 1890, pp. 310–320.

Chalmers (1887, p. 13) says:—“Port Moresby is a village of 1000 inhabitants, 700 pure Motuans, and 300 Koitapuans. The former are seamen and great travellers, coming in past ages from the distant west.”* They made plantations on land belonging to a once powerful tribe of sorcerers, the Koitapu, whose territory extends inland as far as the Laroge River, the Koiari claiming all the other side. The Koitapu “are much feared [by the Motu] because of their supposed wonderful power over sun, rain, heaven, and earth, north-west and south-east monsoons; specially do the winds belong to them . . . They are no doubt the real owners of the soil . . . By no conquest do the Motuans live here, but simply because the Koitapuans allow them, saying:—‘Yours is the sea, the canoes, and the

* This statement requires verifying. It is certain the Motu did not originally come from the west; but it is possible they formerly settled further up the coast, and entered into trading relations with the Gulf Papuans before colonizing Port Moresby.

nets; ours is the land and the wallaby. Give us fish for our flesh, and pottery for our yams and bananas' . . . The Motu tribe number about 2000 only; their dialect is spoken by about 5000, and they being the people of commerce, through their dialect it is possible to communicate with nearly 20,000 people. The Koitapuans are to be found tacked on to the Motu tribe at all their villages, as well as on the east side of Redscar Bay; also at Padiri, and at Kevana, about thirteen miles inland of Caution Bay. They number about 2000, very much divided amongst themselves. I have never heard of the two tribes fighting, but often the Motu tribe has helped the Koitapu against their enemies; especially have they prevented the Hulans making raids on them. The Motu are the traders; theirs is the sea, and from Bald Head in the west [long. 144° 50' E.] to Kerepunu, Hood Bay, in the east [long. 147° 57' E.], they have a clear coast, and will allow no interference" (*l. c.*, p. 15). Elsewhere (1887 A., pp. 63–68) he describes Motu marriages and funeral customs, their religion and other matters; the legend (p. 57) pointing to a common origin with the Koiari, Koitapu and Elema (Toaripi) by no means adequately accounts for the ethnological relationships of the Motu. A Port Moresby legend, on the origin of fire and the dispersion of the tribe, is given in "The Arch. Rev." iv., 1890, p. 148.

Moresby says (p. 157):—"These people, and all the light-coloured Malay race of eastern New Guinea, are without bows and arrows."

Stone (1880, p. 75) informs us that:—"The colour of the Motu natives is slightly darker than that of the inhabitants of Roro, varying, however, in different individuals from the lightest, resembling that of a Portuguese, to the darkest, which is a rich shade of chocolate. Compared with them a pure Papuan looks black, and on account of this and his cannibal propensities, he is generally disliked by the light Papua Mahori race, who inhabit the east of New Guinea. The Motu women have rounder features than the men, the eyes of all are brown, the nose aquiline, but inclined to thickness. They have large mouths, well-formed lips and ears, and slightly prominent cheek-bones. Their hair grows luxuriantly, and is usually worn frizzed. In colour it is generally black, but sometimes a burnt-sienna tint is visible, especially towards the extremity of the hairs. They are very

[21*]

diminutive in stature, are slightly built, but well proportioned, athletic, good-looking, merry, and fairly intelligent . . . The average height of the men is 5 feet 4 inches [1625 mm.], and of the women 4 feet 11½ inches [1510 mm], while the girth round the chest of the former averaged about 2 feet 9 inches [838 mm.].” Six persons of both sex were measured.

He also informs us (p. 189):—“It may seem strange that the Motu, living as they do on the sea-shore, should scarcely ever fish, and are even willing to purchase fish when occasion offers.” A dance is described on pp. 193–195; strangely enough, “among the Motu the unmarried of both sexes join in the dances . . . the men and women stand alternately.” Romilly (1889, p. 54) also describes a Motu dance. He says dancing is not much in vogue.

Chalmers gives an interesting account of the manufacture of pottery by the Motuans, and the preparation for the trading voyages to the Papuan Gulf in the second chapter of “Pioneering,” &c. G. S. Fort says (C. 5883, 1890, p. 29) that on one occasion it was estimated that 20,000 pots were exported, for which 150 tons of sago would be brought back in exchange. Romilly has stated (1893, p. 257) that a fleet of twenty *lakatoi* (a *lakatoi* is a trading vessel made by lashing three or more canoes together; it has remarkable sails shaped like crabs claws), will carry some 600 men, each of whom takes about fifty pots. These vessels sail up the coast to various places, and as far as Bald Head, a distance of over 200 miles, and return laden with sago, *rabia*. The round trip occupies several months. As much as 190 tons of sago may be imported into Port Moresby in one season. Lindt (1887, pp. 29, 47) gives an account of the *lakatoi*, and the method of sailing.

2. LOYALUPU.

Stone was much struck by the Hula people who visited Port Moresby during his stay there. “The hair grows in ringlets or curling locks, which, combined with its colour, the comparative fairness of their skin, their symmetrical features, and the fine proportions of their body,

constitute them a people of great beauty" (p. 191). He adds (p. 190):—"The Hula people, on the contrary [to the Motu], who belong to the Kirapuno tribe, are most expert fishermen, using a well-made net for that purpose, and a fishing spear, or *karaut*, resembling a besom." On pp. 195-197 a dance is described, in which a decorated bamboo beheading knife is carried in the mouth. Stone gives a figure of this (p. 196), he calls it a charm, or *kotsiva*; but Chalmers (1887, p. 131) describes it as a bamboo knife. He says:—"These knives are nicely figured, and have in the centre a bundle of variegated feathers, and when used in battle are carried in the mouth, so as to be ready to cut heads off."* Chalmers (1887) gives a description of "Kerepunu Feasts and Burials" on p. 323, in his vivid and interesting style. Gill (1885, p. 288) says:—"The Hulans are fairer than the Motu tribe, and the Maivans . . . the tattooing is simply perfect." He describes a sun-dance on p. 302.

Lindt says (p. 67) that all the women at Kalo, which is a few miles from Kerepunu, are tattooed from head to foot, and a peculiar necklace-like V-shaped mark, ending in a peak between the breasts, indicate those engaged or married. An annual dance of newly-tattooed girls at Kalo is noted in "The Archæological Review," iv., 1890, p. 149.† "Further eastward the lighter-coloured Polynesian type becomes more and more pronounced" (Lindt, p. 71).

The territory of the Aroma extends from near Keppel Point (about 147° 55' E.) to Chesunt Bay (148° 20' E.). Very little of ethnological importance has been written about this tribe,‡ and still less of their artistic productions. A great deal, however, has been written about Koapena.

Koapena, the chief of Aroma, is said by Chalmers to be "the finest man from Bald Head to East Cape." "He was well made, muscular, and strong, and notwithstanding his light copper-coloured skin and large head of hair, a handsome fellow. His features, slightly pitted with small-pox, were aquiline, his nose well arched, and mouth and chin full of decision and firmness. His broad shoulder, and arms were tattooed with

* Cf. "Album," pl. 289, No. 1.

† Cf. also Finsch, 1885, p. 19.

‡ Cf. Chalmers and Gill, 1885, pp. 297-301.

blue marks, which represented the number of people killed by himself in fight; sixty-three were counted, besides many other marks, which represented the enemies killed by his tribe" (Lyne, p. 114). Chalmers gives a long account of him (1887, pp. 274–280), and says he is about 5 feet 10 inches high [1780 mm.], splendidly built, every muscle well defined, his gait erect, and truly proud" (p. 276). Mr. G. R. Askwith, in his "New Guinea Notes,"* says:—"He was 6 feet 1 inch high (without his frizzed hair), 39 inches round the chest, 38 inches round the haunch, 17 inches in the calf, and 12 inches in the arm. His hand was enormous."

Lyne (pp. 102–122) says a little about Kerepunu. He says:—"One chief had the posts upon which his house rested carved with various devices, one representing a crocodile, some 10 or 12 feet in length, and so well done that a very good idea was presented of this pest of all New Guinea inland waters."

VI. Mailu.

According to Chalmers the Mailu (Mairu), or Mailiu, as it is spelt in his map, occupy the country from Chesunt Bay to Mullins Harbour, a long stretch of coast, which includes Cloudy Bay, Table Bay, and Orangerie Bay. Lyne (pp. 135–143) describes a visit to Mailu Island (Toulon Island), and says:—"Tattooing appeared to be practised very extensively among the women."

Very little is known about this region, and that little is practically confined to the Cloudy Bay natives, who have always borne a bad name for treachery and bellicosity. Romilly (1889, p. 60) witnessed a Cloudy Bay war dance.

The last account we have is that abstracted from Sir William MacGregor's despatches (C. A. 105–1890, pp. 28–36; or C. 6323, 1891, pp. 54–66) by Thomson (1892, pp. 42–47). A description is given of the stockaded village of Merani (about lat. 10° 12' S., long. 148° 30' 40"), which lies about three and a-half miles up the Domarawai River. Three tree

* Cf. C. K. Cooke, "Australian Defences and New Guinea," p. 371.

houses, containing missiles, further increased the military strength of the village. Although the trees stood just outside the strong palisade, the houses were reached by ladders, which rose from within the enclosure. The natives are a fierce, bold, powerful people, skilled in warfare. The alluvial soil round Merani is of great depth and extreme thickness. The climate is the most insalubrious in the Possession. "The language most widely understood is that of the Domara tribe. Domu and Merani speak the same tongue, although they are several miles apart; while Merani and Isimari, separated by 150 yards, speak different languages, and form a united community . . . All these tribes intermarry . . . There are no skull trophies in any of the villages, and, strange to say, they are not cannibals.* Their weapons are the spear and the stone club. The stone adze they do not use except in making sago. The women are tattooed before marriage . . . All the coast tribes have large double canoes . . . with a sail lance-shaped below, deeply crescentic at the free end above" (Mac Gregor, p. 35, or p. 65).

Quite recently a number of bamboo tobacco-pipes have come into the market from "Cloudy Bay," and owing to the kindness of Fenton Brothers, 11, New Oxford-street, London, I have been able to make rubbings of all I desired. Some of these I reproduce on Pl. XI., figs. 178–183. The average length of these half-dozen pipes is 390 mm. Very frequently the ornamentation is bounded at each end of the pipe by a plain encircling black band, and the hole for the bowl is usually bored either in an interval left in the band at the blind end of the pipe (Pl. XI., figs. 181, 183), or at the commencement of the upper longitudinal band (Pl. XI., figs. 179, 180). A long, narrow area generally extends from the bowl-hole to the band at the opposite end, and a corresponding longitudinal band usually occurs on the opposite (under) side of the pipe. These longitudinal bands may be plain, or black, or variously ornamented, the most frequent decoration being a series of black triangles along each side of the band (Pl. XI., figs. 181, 183). These triangles are generally so arranged as to leave a central, plain, zigzag band; but in every case it is evident that

* Thomson (p. 47) erroneously says they are cannibals.

the artist did not have the zigzag in his mind as the main device; its occurrence is incidental, not predetermined. The upper and under longitudinal bands naturally leave two longitudinal lateral areas to be dealt with. These may or may not be ornamented with the same pattern, but a variation in the pattern rarely occurs on the same side.

The looped pattern, enclosing circles or broken ovals, as shown in Pl. XI., figs. 181, 183, and serial zigzags (Pl. XI., figs. 179, 180) may be taken as being especially characteristic of these pipes.

Mr. A. Goldie showed me some turtle-shell ear-rings from Cloudy Bay, the ring of which was smooth or serrated, and depending from it was a cross with serrated ends, or depending from the upper ring was a lower one, with long, irregular rays projecting all round. He also has some of pearl-shell similar to the last.

Mr. Goldie also informed me that Cloudy Bay was the northern limit of the necklaces made of flat, pink shell, to which real or shell-imitation boars' tusks are appended. These are common in the Massim District. I also gathered from him that about here was the southern limit, on the mainland, of the bamboo-pipe, and the northern limit of carved ebony lime spatulas.

VII. Various Objects of the Central District.

TOBACCO-PIPES.

The tobacco-pipe, *baubau*, extends throughout the whole Central District, but the use of tobacco is, in some districts, quite a recent habit. I have incidentally referred to the pipe, when dealing with the several divisions of the district. Everywhere the design is burnt into the rind of the bamboo. Those pipes, which I believe to come from Maiva, have the patterns burnt straight away on the bamboo, whereas those which come from Cloudy Bay have the pattern first scratched in outline, and then the outline is gone over, or the spaces filled in, by charring. The pipes from "Port Moresby" and "Kerepunu" belong to the former technique.

Further, it appears to me that the Maiva more thoroughly and consistently cover the surface to be decorated, and, to my eye, the effect

is richer than that displayed on the pipes from the other regions. Although some of the pipes from "Port Moresby" and "Kerepunu" have symmetrical designs,* there is often an aimlessness in the decoration, and the orifice for the bowl is rarely utilised as a starting-point for a design; most frequently it appears to have been pierced quite casually. The Cloudy Bay pipes, on the other hand, exhibit much more system in their method of decoration, as a pattern usually runs down the whole length of the pipe; and when panels are employed, they are ranged serially in the same manner. In these pipes, too, an upper and a lower longitudinal line are usually present, and thus serve as a sort of backbone to the scheme of design.

BELTS.

The belts, *tikini*, of the men of the Central District are made of a kind of tapa. They are about 3 to 3.75 metres in length, and 45 to 75 mm. in width. The best of these belts are said to come from the Aroma country. The simple patterns, which vary in detail only, are stained in deep orange, yellow, grey, and black. The following general description applies to most of those obtained at Kerepunu and its neighbourhood.

A fine black zigzag line runs near each margin of the belt, and the outer toothed areas are painted with an orange colour (Pl. XI., figs. 173, 174). At varying intervals there are series of vertical broad grey lines, and in the interspaces between these groups of lines is a narrow or broad (rarely double) orange band, bordered with black punctate lines.† Very often only the ends of the belts are ornamented in this manner, the rest of the belt merely having the orange border and a central orange band.

The appearance of these belts irresistibly suggests the idea that the orange band is applied to the belt, and that it passes behind the barred intervals. It would be interesting to determine whether we have not, in the pattern of these belts, a reminiscence of an earlier condition when the belt was made of a different material, and when the threading or interweaving was actually structural.

* Cf. "Album," pl. 318, No. 5.

† Cf. "Album," pl. 319, No. 3.

NETTED BAGS.

Netted bags are very characteristic of this district. The designs on them are not made by coloured cord being introduced when the bag is being manufactured, but are due to a dyeing of the strands after the bag is finished. I regret that I have not been able to examine as large a series of these bags as I could have wished. Some of them have what may be termed an "in-and-out" pattern, suggestive of plaiting. I have previously alluded to the occurrence of a meander pattern, or at all events of isolated angular spirals.

LIME GOURDS.

Narrow, pear-shaped gourds, used as lime receptacles, come from the Loyalupu, and probably other regions (Pl. XI., figs. 166, 167). They are ornamented with burnt patterns, sometimes with crosses, but more frequently with zigzags, but other designs may occur (Pl. XI., figs. 168-171), most of which are also tattoo marks. The originals of figs. 167-171 came from Kerepunu. The lime-gourd of Pl. XI., fig. 166, has also been sketched in the "Album," pl. 279, No. 6.

The spatulas are slender sticks, with a broader handle, which is carved in a simple manner; occasionally they are decorated with feathers.

COCONUT VESSELS.

Carved coconut vessels also come from this district. These may have a lid, as in a specimen (Pl. XI., fig. 175) in my possession. The whole surface of the nut appears in some cases to have been first covered with vertical and horizontal incised lines, so as to leave small, squarish prominences. Part of the beaded surface was removed in such a way as to leave a design composed of lines, triangles, and other simple geometric figures (Pl. XI., figs. 176, 177). In most specimens the pattern was first carved, and then the part in relief was scored by a kind of coarse cross-hatching. This style of decoration also occurs on other objects obtained

at Kerepunu and neighbouring places, and it also is carved on the posts of the *dubu*, or sacred platform, at Tupuselei,* a village about fifteen miles south-east from Port Moresby. Some of the designs on these coconut vessels resemble those occurring on the Cloudy Bay pipes (Pl. xi., figs. 178–183), and I suspect that most of them come from about that region.

SHIELDS.

The shield characteristic of the Central District is flat, oval, and constricted in the middle. The handle is a simple, rigid, cane loop. The shield is encircled by a broad band of plaited rattan, the pattern on which is usually concentric diamonds; it is often decorated with gaily-coloured feathers. The exposed semicircular ends of the shields are usually quite plain; but in two specimens in the Cambridge Museum simple patterns are carved and painted, one with a couple of spirals in black (o. III. 89 x. 5 c), and the other (o. III. 89 x. 5 b) with red zigzags edged with black. Illustrations of typical shields will be found in Finsch, 1888, pl. xxiv., fig. 6, and "Album," pl. 283, No. 2. Another variety of shield is figured in the "Album," pl. 284, No. 3.

VIII. Tattooing in the Central District.

The subject of tattooing is such an important one, and has so direct a bearing upon the art of the people, that I have brought together all that I could discover on it.

The first account of the tattooing of the Motu is that given by the Rev. Dr. W. Y. Turner.† He says (p. 480), "The custom of tattooing is carried to great perfection among the Motu women, whose bodies are

* Cf. Chalmers and Gill, 1885, p. 281; Chalmers, 1887, pl. on p. viii.; and Finsch, 1888, fig. 34, p. 321.

† "The Ethnology of the Motu," Journ. Anthropol. Instit., vii., 1878, p. 470.

covered with tattoo marks resembling fine lace garments. In (figs 49, 50) the markings will be seen as copied from the girl Tabuta. The paint used in tattooing being of a blue-black, it does not come out in the photos., and so I took an exact pencil copy of the marks on this girl's body. Tattooing is universal among the women, but does not obtain among the men, with

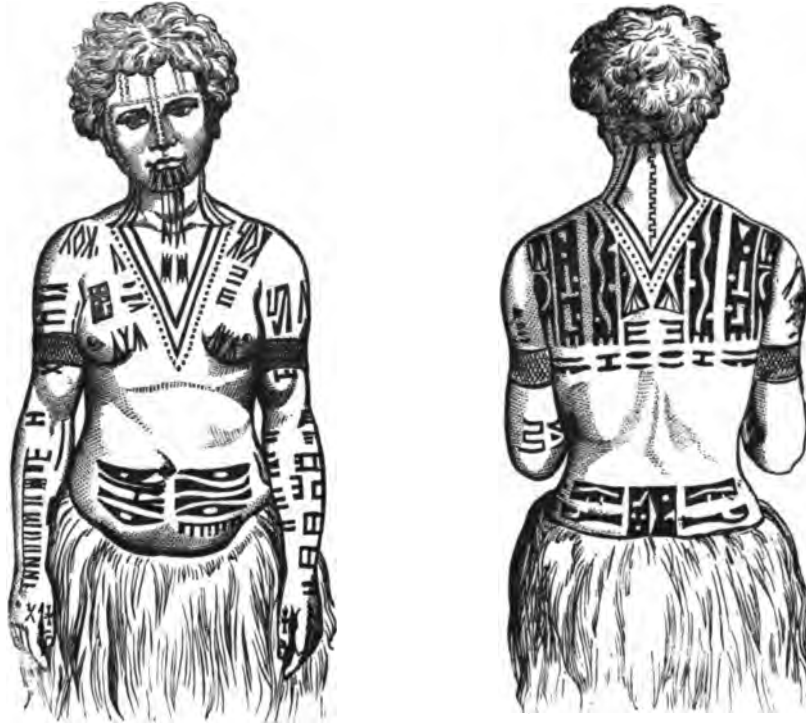


FIG. 49.—Drawing of Tabuta, a Motu girl.

FIG. 50.—Back view of the same.

By Rev. W. Y. Turner, M.D., (from *Journ. Anth. Inst.*, vii., 1878, fig. 4., p. 480).

the exception of an olive-leaf marking in the clavicular region of some men, which probably denotes bravery in battle.

“This marking is begun upon the face when the subject is a little girl, one line being done at a time, the chest, arms, &c., being done at intervals as she grows older. The pattern upon the face is always as represented here, but the marks on the body vary with the individual. The patterns

are, however, always of a geometrical type; flowers, leaves, fish, or birds never being attempted.

"The triangular marking on the chest (fig. 49) denotes that the girl who bears it is engaged to be married. When marriage is completed, the spaces left bare are filled up, and the marking extends as far as the knee . . . The marking is neat and symmetrical."

The Rev. W. G. Lawes gives a little additional information on this subject in his "Ethnological Notes on the Motu, Koitapu, and Koiari Tribes of New Guinea."* "In reference to the tattooing of the women [of the Motu], there is but little variation in the pattern and style, but this seems to arise rather from inability to design new than from any special attachment to the old. They were glad to get new patterns from some of our printed calicoes and other English designs. They attach great importance to the tattooing as a means of enhancing beauty. A woman lighter than usual is esteemed handsome, principally because the tattooing shows up so much better on the lighter skin.

"The Kerepunu women of Hood Bay are tattooed, and there is no essential difference in pattern from that of Motu.

"Some of the men are tattooed across the chest and forehead; but in their case it is a decoration of honour. It means that the wearer has shed human blood . . . Raids were sometimes made on small villages along the coast for the simple purpose of killing some, that the young men may come back and be tattooed.

"The tattooing is done by marking the pattern on the skin with lamp-black and water, and then puncturing the skin by lightly tapping a thorn on it. The whole of the pattern is gone over in this manner, and but little pain or inflammation seems to result from it."

By far the greater part of our knowledge of tattooing of the Motu and allied tribes is due to Dr. O. Finsch, and the following account is taken from his Paper, "Ueber Bekleidung, Schmuck und Tätowirung der Papuas der Südostküste von Neu-Guinea."† Tattooing, *Rāwarāwa* [the Rev. W. G. Lawes' "Grammar," &c., 1888, gives *revareva*, tattooing, anything striped

* Journ. Anthropol. Inst., viii., 1879, p. 369.

† Mittheil. Anthropol. Gesells. Wien. xv. 1885.

or variegated—hence writing, printed matter; *revareva hatua*, to tattoo—*hatua* = to plait, as mats, to weave, to beat a bamboo drum, to tattoo], as everywhere in the South Seas is simply a decoration of the body. Characteristic for the tattooing of country are the letter-like marks—they frequently employ the Maltese cross and a kind of St. Andrew's cross.

The Motu and the related tribes have the *gado* [*gado* = throat, voice, &c.: Lawes], a double streak which extends, obliquely, from the collar-bone to the pit of the stomach, and is often repeated, in miniature, on the nape of the neck. This is wanting to the east of Keppel Bay. The marking of the remaining portion of the body consists chiefly of single panels, transversely or longitudinally arranged, which only, on the arms, sometimes form large symmetrical figures. On the whole, the tattooing of the Motu lacks symmetry, and even when it apparently occurs, a minute comparison shows that the figures in question do not correspond on both sides of the body; even the median line may not correspond to the vertebral column. Sometimes scarcely two marks on a person correspond. This is partly accounted for by different sides of the body, or portions of the same, being tattooed at various times by different people. The largest designs of single panels are generally on the shoulders. They consist, almost exclusively of straight and oblique lines, partly angular and zigzag in form; curved lines and spirals are very rarely seen, as also are dotted, with the exception of the *toto* near the chest-mark.

Further east at Keppel Bay [Aroma] one finds, to the contrary, curved lines more frequent, and the quite symmetrical figures form a bilaterally symmetrical design on the body as a whole.

The tattooing always has a blue-black colour, and is more conspicuous on clear-coloured individuals than on the dark. A sharp outline rarely occurs, giving the impression of splash-work. The tattooed areas on different portions of the body apparently bear the same name as the body regions—for example, *udu* is the name alike for the tattooing on the nose and the nose itself; similarly, *gado* is the throat and the large acute-angled chest-mark, but of the latter the upper streak is called *natuna*, or “child,” the lower, *sinana*, or “mother,” and the dotted line beneath these is called *toto* (according to Lawes' Vocabulary, *toto* signifies a sore and the name of a

tree). Tattooing is begun early in children; girls from four to five years of age sometimes have the face already marked in this manner. Those of six to seven years old often have also the arms, armpit, and lower portion of abdomen. Girls of twelve are frequently marked with tattooing on the legs. It appears that the tattooing of the vulva occurs last of all, when the girl has arrived at a marriageable age, which is about fifteen to seventeen years of age. The tattooing does not by any means advance according to a fixed rule; the *gado* is a token either of betrothal or of marriage.

The Koitapu women are tattooed precisely in the same manner as the Motu. Among the Koiari of the interior tattooing is not the custom among married women, only occasional ones have a few lines visible. The same holds for the women of Kadi and Doura tribes at the back of Redscar Bay.

To the East, as far as Keppel Bay, in Yopukuri ("Vabucori"), Pari, Tupuselei, Kaire, and Kapakapa, where the inhabitants belong to the Motu stock, and with slight local variations, speak the same language, Finsch found quite the same tattooing.

In Tupuselei the tattooing is as in Hanuabada (Port Moresby); sometimes the chest-mark is not continued round the back of the neck to the middle of the shoulder, and on the whole it is, perhaps, somewhat large-patterned. One also finds the same at Port Moresby, where sometimes the back, as well as the back of the neck, are decorated with longitudinal panels. He found a woman with two Maltese crosses on a dark ground, which ornamented the space of the shoulder blade.

The tattooing in Kaire (or Kaile) is as in Hanuabada, sometimes more beautiful and exact in the outline, but only in individual cases, as likewise occurs at Port Moresby. Tattooing in the female sex commences, as among the Motu, in early youth, at from six to seven years, first on the face and arms, later under the arms, on the abdomen, and thighs. A small girl in Kaire, of about seven years old, already had the face, arms, and hands completely tattooed.

At Hula, Hood Bay, the tattooing of the women is, on the whole, the same as among the Motu, for instance, there is the double chest-mark

(*gado*), but it is not always completed, sometimes there are only the lateral lines. The separate panels are regular, and are very often ranged in longitudinal series, instead of transversely; however, this causes scarcely any noticeable difference. The St. Andrew's cross, on a dark ground, as well as the Maltese cross, are marks which are frequently employed. One sees very richly, and extremely accurately tattooed women, the marking of whom is more symmetrical than among the Motu; the face, also, is in many cases more richly tattooed than among the Motu. One sees further, as in Port Moresby, children of every ages in all the early stages of tattooing.

Finsch did not find any difference in the tattooing at Kerepunu from that at Hula.

The tattooing at Maopa (Aroma) is wholly different from that customary among the Motu; for example, the characteristic double chest-mark (*gado*) is lacking, and the pattern does not consist so much of single panels usually transversely disposed, but of longitudinally arranged figures which form over the entire body a bilaterally symmetrical whole from the forehead down to the soles of the feet. All portions of the body are tattooed. Another difference appears in the relative number of curved lines, though the main figures are in straight lines; crosses on a dark ground are very frequent. The pattern has not the letter-like character of the Motu; it is also far richer, especially on the face, where zigzag lines are more frequently seen, and, at times, oblique stripes on the cheeks. Further the tattooing seldom accurately follows the outline, it having a more or less dissolving appearance, which is difficult to delineate. On the whole, there are fewer young women already so completely tattooed as among the Motu, and still fewer children.

The tattooing of the men. This is, on the whole, rare, and is confined, as a rule, to zigzag lines on the face, similar to, and sometimes richer than that of the women. There is none on the chin; sometimes the breast and arms are tattooed, and single marks may be made on the thighs and the back. The men are only tattooed when they have acquired some importance; the breast-marks can only be made when they have killed some one.

Hila, the deposed chief of the Motu, and quite the oldest man in Anuapata, is richly tattooed on the breast and on the arms down to the wrists. He bears on his chest the double obtuse-angled stripe, like the *gado* of the women; but they appear like the teeth of a saw; in the middle of the chest two zigzag lines extend to the navel. The marking of arms is similar to that of the women; however, the whole tattooing is nearly obliterated as in all old people. On the thigh is a row of crosses.

Vaburi, a man of about fifty-four years old, has both upper arms tattooed, and two zigzag stripes down the middle of the small of the back. They indicate that he has killed three people, two men and one woman.

Sometimes zigzag stripes are found on young people. They are, in that case, inherited from the father, and by no means signify that the party in question has killed any one.

In other Motu villages Finsch found exactly the same as in Port Moresby; seldom more than some lines on the face; sometimes the arms tattooed. The same occurs in Hood Bay.

The breast tattooing he remarked chiefly in Delene, Hall Sound, opposite to Yule Island, and it is the custom to the west as far as Freshwater Bay.

The men of Maiva were tattooed in a precisely similar manner. They had the upper chest with two transverse stripes partly band-like, partly of a more saw-tooth pattern, a double zigzag line descended from them. The upper arm was marked in a somewhat similar manner to the right arm of the girl in fig. 49; in another young man the left forearm had a long row of large spots. Only the older people, and of these only two, had the breast tattooed; the younger only the upper arm, and most nothing at all. One man had a mark on the thigh, which also was seen on one at Yule Island.

Eastwards of Hood Bay he could not recall having seen breast tattooing, yet there appears in the Aroma District of Keppel Bay similar tattooing to that among the Motu, but, on the whole, it is rare. As a rule, there are the longitudinal zigzag streaks on the forehead and cheeks, and sometimes on the upper arm. In a few cases it extends to other regions. Goapāna [Koapena] the chief, who was the most richly tattooed, had this ornamentation on the left arm, both shoulder blades, and on the face, and a pair of

panels in front of and behind the thighs. The marks consisted mainly of dark long panels, in which a clear cross extended similar to that of the women's, and there are also simple + like marks which he had hitherto nowhere noticed.

"Without doubt," continues Dr. Finsch, "the tattooing has reference to exploits, but I cannot discover the connection. Certainly the + marks were not signs for victims, for I counted more than thirty, and no single Papuan has ever completed that number."

Dr. Finsch then proceeds to fully describe the process of tattooing:—The pattern is sketched in black (burnt coconut-shell and water), with a little piece of wood of the size of a match. The tattooer, who is a woman, draws the details without previously having sketched in the whole design; this produces great variations, and, often, an asymmetrical design. He concludes by saying: "Mr. Lawes informed me there are, moreover, certain marks which belong to particular tattooers in the same sense as the trade-marks of the potters, and are, in a sense, family marks; but it is not possible for even a trained eye to discover or know these insignificant distinctions." Dr. Finsch, I suppose, alludes to strangers, for the natives would surely be able to distinguish these marks readily enough.

IX. General Account of the Decorative Art of the District.

The decorative art of the Central District is as distinct as that of the other main districts of British New Guinea, and there is also a very remarkable amount of uniformity when one takes into account the extent of the district and the number of tribes which inhabit it.

Port Moresby, which is now the capital of British New Guinea, has for about twenty years been the head station of the London Missionary Society, and for about the same period Mr. A. Goldie, the well-known naturalist and trader, has lived there. Owing to Port Moresby being the seat of the Government, and to the trade which has for about a quarter of a century taken place between the white men and the natives, and the intercourse between the various tribes of natives, objects from other districts have found their way there, and have been distributed as coming

from "Port Moresby." This has caused a little perplexity in the past in the minds of collectors at home, but not so much as might have been expected, thanks to that rigid conservatism of the native mind which is the sheet-anchor of the ethnographer.

As an example of this mental rigidity, even in ornament, I need only refer to the annual trading voyages from Port Moresby to the Papuan Gulf. We have already seen that the decorative art of the latter district is extremely distinctive in character, but we do not find that the art of the Motu has been affected by that of the Motu-Motu, or *vice versa*; each district remains true to its own artistic traditions.

The same holds good in the other direction. Carved lime spatulas, or canoe-paddles with carved handles find their way along the coast from the Massim District, but do not appear to have affected the local style of decoration. It was owing to my surprise at seeing the difference in what may be called the artistic feeling of the carved handle of a paddle (Pl. XII., fig. 198) from that of the lime gourds, club, and belts (Pl. XI., figs. 167–174), which my friend and host, the Rev. A. E. Hunt, brought from Kerepunu, when I was living on Mer (Murray Is.), in 1888–89, that first started me on this line of research. I then suspected, what I have since found to be the case, that the former was an imported object, whereas the latter were of local manufacture. In this district beautifully ornamented gourds may be obtained, which it appears actually come from the Trobriands.

The remarks which follow are based on an examination of objects in museums, most of which are not labelled with a definite locality, or of which the locality is too general to be of much value. The decorative elements or "ground-forms" may be roughly subdivided into—(1) panels, and (2) various figures.

(1). Panels. The drawing of isolated rectangular panels is a very distinctive feature of the decorative art of the district. On such objects as tobacco-pipes the panels must from necessity follow one another more or less serially, but they need not be co-ordinated into a definite pattern. When larger surfaces are ornamented, as for instance the bodies of women (figs. 49, 50), the panels may also be somewhat irregularly disposed, but still there is a tendency, at all events in some places, for the designs to

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have an orderly and symmetrical arrangement; but in no case is there absolute symmetry.

One of the most common form of panel, especially in tattooing, is the Maltese cross (Pl. XI., fig. 180), perhaps it would be more accurate to describe it as a light St. Andrew's cross on a dark rectangular panel, sometimes two, or even all of the component triangles are lightened by not being entirely filled up with black (Pl. X., fig. 151), or they may be otherwise modified.

A combination of light St. George's, and St. Andrew's crosses on dark fields is very frequent, and the arms of the latter cross often become leaf-like (Pl. X., fig. 165), and may rather monopolise the field (Pl. X., fig. 162); such a design as Pl. X., fig. 161, has evidently been suggested by two panels similar to the last being placed close together, the contiguous halves forming the new design, Pl. X., fig. 157, illustrates how this could come about. Some of these designs, as, for example, Pl. IX., fig. 140; Pl. X., figs. 164, 165; Pl. XI., fig. 166, show a remarkable resemblance to the Union Jack, a sort of anticipation, as it were, of the British Annexation! but it is quite certain that they are not derived therefrom as some have supposed.

A very frequent panel, or, more strictly speaking band (fig. 50; Pl. X., fig. 151; Pl. XI., fig. 167), has a simple or multiple zigzag line running down its length, the triangular ground-spaces being usually relieved by a light central line. An analogous design consists of two zigzags, which form a series of diamonds, which are often ornamented with crosses (Pl. X., figs. 151, 152).

Panels with concentric lines (Pl. IX., fig. 149), or crossed by diagonals, the triangles of which are filled in with concentric angled lines (Pl. IX., fig. 142; Pl. X., fig. 153) also occur.

In describing some pipes from Cloudy Bay, I alluded to the fact that the patterns are disposed longitudinally with regard to the pipe. I believe it will be found that in the north-eastern part of this district the patterns are also mainly longitudinally arranged, but are interrupted at intervals by encircling bands. The latter pipes can easily be distinguished from those of Cloudy Bay by their greater length, differences in the designs (*cf.* Pl. IX.,

and Pl. XI., figs. 178–183), and by the absence of an etching of the design preliminary to the charring.

(2). Other designs may be inscribed within bands, or may be distinct, as, for example, Pl. X., figs. 154, 155, and Pl. XI., figs. 168–171, which may be compared with those in figs. 49 and 50, and in the illustrations of tattooed women given by Dr. Finsch.

The most widespread and apparently important of these isolated designs are those shown in Pl. IX., fig. 141; Pl. X., figs. 156, 158; Pl. XI., fig. 170. Judging from Finsch's drawings (1885, figs. 20, 21, 22, 25) similar designs are tattooed on people only below the armpit, or on the shoulder. I have no idea what is the significance or origin of this design.

The angled design tattooed on the chest (*gado*), figs. 49, 50, also recurs on a pipe in the Cambridge Museum (o. III. 92. 76. 13), Pl. X., fig. 156.

An examination of Plates IX.–XI. will give a very good idea of the style of the ornamentation which extends throughout this district. The details of the designs may either be dark on a light ground, or light on a dark ground. These two alternatives are displayed on the human skin by means of tattooing, the colour being of a blue-black; while on the bamboo tobacco-pipes and lime-gourds the pattern is caused by charring. "These decorations are burnt into the bamboo with a glowing slice of the sheathing leaf of the coconut, kept almost at a white heat by the native artist blowing upon it. The end of the glowing ember forms a fine point, which on being slowly moved along the desired lines leaves indelible tracks."—(Lindt, 1888, p. 34.)

Noticeable features in the decorative art of this district are the preponderance of straight lines over curved lines, the occurrence of dotted lines and of very short lines, which form a kind of fringe to many of the lines.

The monotony of artistic ideas has been noticed by Mr. Lawes (1879, p. 370), who says, concerning tattooing among the Motu:—"There is but little variation in the pattern and style; but this seems to arise rather from inability to design new, than from any special attachment to the old. They were glad to get new patterns from some of our printed calicoes and

other English designs." I do not, however, know of any designs on objects in Museums, which have the appearance of having been copied from articles of trade. These tattooed designs, which are repeated on pipes and other objects, are doubtless of considerable antiquity, as it is probable that time-honoured patterns are most frequently tattooed on the person.

Very remarkable, also, is the absence of delineation of the human or of animal forms. Bounded on the north-west by a luxuriant art, based on human faces and forms, and limited to the south-east by bird-scrolls and bird and crocodile derivatives, not to mention human effigies and representations of various animals, these central folk are unaffected by these two very distinct forms of artistic activity. The only exceptions, so far as the evidence at my disposal goes, is in the transitional country north of Hall Sound, and a few carvings of crocodiles in certain houses or *dubus*. Is this dearth of anthropomorphs and of zoomorphs due to a difference in the religion of these people, or is it chiefly an ethnological problem? The inland population is essentially Papuan in origin, and enough evidence has been collected to prove a foreign influence along the coast of British New Guinea from the south-east as far as Cape Possession. I shall again allude to this in my concluding section, and at present will content myself with putting the question, What effect have these immigrants had upon the art of this district?

The final answer can only come from one who has made a careful study of the problem on the spot; but I venture to suggest that the evidence at present before us supports the view that the decorative art of the district, which is mainly characterised by the employment of cross-inscribed panels, is proper to the Papuan autochthones. A difficulty arises when we come to a consideration of the tattoo-patterns, they being precisely similar to the designs burnt on bamboo-pipes or lime-gourds. This confronts us with the further question, Did the immigrants adopt the patterns from the natives, or *vice versa*? I certainly incline towards the former alternative. The immigrants do not appear to be at all an artistic people, and Lawes credits them with paucity of invention. On the other hand, their women are far more richly and universally tattooed than those

of the inland tribes; in fact it appears as if this practice had spread from the former to the latter. The only suggestions I can offer on this head are that the immigrants were a tattooed people, and that when they arrived their men exceeded their women in number, and consequently they had to intermarry with the original inhabitants. The influence of the energetic strangers was prepotent, and the custom of tattooing spread not only among their native wives, but also among their kinsfolk; and finally the designs brought by the travellers were swamped by the local art, and, as in religion and magic, so in art the conquerors had to yield to the psychological influences of the conquered.

DECORATIVE ART OF THE MASSIM DISTRICT.

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I. General Description of the District.

Following Dr. E. T. Hamy,* I adopt the term Massims as a collective name for the mixed people inhabiting the archipelagoes off the south-east of New Guinea. The history of this term is given in M. Hamy's Paper. As there are at present no means of distinguishing the inhabitants of the islands from those of the adjacent mainland, the same term will here be applied to all the coast population from Pouro (Mullen's Harbour) to Baunia (Bartle Bay), and to all the islanders from the D'Entrecasteaux to the Trobriands and the Louisiades. I am aware that I am still further extending the scope of the term Massim, which originally arose from imperfect knowledge of the island of Misima, but I employ it solely as a convenient conventional name.

It appears that the following divisions can be distinguished in this District:—(1) Mainland and Moresby Group; (2) The Louisiade Group; (3) The D'Entrecasteaux Group; (4) The Trobriand and Woodlark Groups. I have here given them in the order in which it will be convenient to consider them.

* "Étude sur les Papouas de la Mer D'Entrecasteaux."—*Rev. d'Eth.*, vii., 1888, pp. 503–519.

As is usually the case in an archipelago, the inhabitants are great traders and travellers. The smaller articles of barter are widely distributed, and as many of these, such as lime spatulas and gourds, or canoe paddles, are usually ornamented, there is a tendency towards uniformity in the art of the District. This is more noticeable in the first three subdivisions. The art of the Trobriands is usually very characteristic, but Trobriand lime gourds appear to be traded even to the mainland, and have been mistaken for indigenous productions.

The absence in very many cases of localities on the labels of museum specimens from this district has rendered my study of this region less precise than I could have wished, but by noting all the objects in the museum I have visited, which have their *locale* affixed, I believe I can determine with approximate accuracy the main artistic characteristics of the four subdivisions which I have enumerated above.

As certain designs are employed throughout the whole District, I think it advisable to first deal with these, irrespective of the spot where they were obtained, and to conclude with the ethnography and decorative art of the subdivisions of the District.

II. The Characteristic Designs of the District.

(A). THE BIRD MOTIVE.

1. *Patterns derived from Birds' Heads.*

Occasionally one finds paddles of which the handle terminates in a carved representation of a bird's head; but usually where the bird's head motive is carved on implements, more than one head is present. In this case the heads may be arranged in a linear series, or occasionally they may be variously disposed. As the former are so much the more important, they alone will be described.

In fig. 51 we have a rubbing of part of a spatula, in which a bird's head is unmistakably carved to the left; its head is partly formed by the hook of the beak of



FIG. 51.

Rubbing of the half of one side of the handle of a spatula in the Author's possession. One-third natural size.

the bird next to it, whose head in its turn is similarly derived from the third bird.

In the Cambridge Museum a spatula (o. III. 94. 44) has two birds' heads which, although they are not united, each has an additional eye-spot in the hook of the beak. In the Berlin Museum (VI. 4290) there is a somewhat similar spatula, also with no locality, but in this the interlocking of the birds' heads has taken place. I have one very closely resembling the latter which is stated to come from the Louisiades.



FIG. 52.

Rubbing of upper two-thirds of the decoration of a club (type II.) in the Glasgow Museum ('89.77.v.). One-third natural size.

The scroll pattern which results from this serial interlocking of the birds' heads forms a pleasing pattern, which is of extremely frequent occurrence in this district.

Fig. 52 is a very characteristic example; it forms part of the decoration of a club in the Glasgow Museum ('89, 77. v.). The decoration is circumscribed by a border containing a zigzag line; each panel is longitudinally divided by three lines, and the scroll pattern runs down each longitudinal area thus marked out. The longitudinal disposition of panels is very characteristic of the decorative art of the District. Very often the patterns run all the same way, but sometimes, as in this figure, one band is reversed. As a result of this a new pattern results, the halves of which are more or less symmetrical to a median line. I shall shortly show how this has been noted and utilised.

When the birds' heads have become definitely involved in a pattern, they naturally are treated from a purely decorative point of view, and realism is totally abandoned. The upper and lower jaw of the bird's beak become converted into several lines, or may degenerate into a single one. The triangular spaces between the heads may remain quite blank, as in fig. 53, which is from a similar club in the Cambridge Museum (o. III. 89. x. 2 b); or they may be more or less filled up with curved lines

concentric to the head. I have seen one club in which these are entirely absent, and are replaced by an eye-spot in each space. In fig. 80 it will be seen that a black triangle occasionally occupies this space. On a club in my possession (fig. 54) the pattern is still more modified in the central

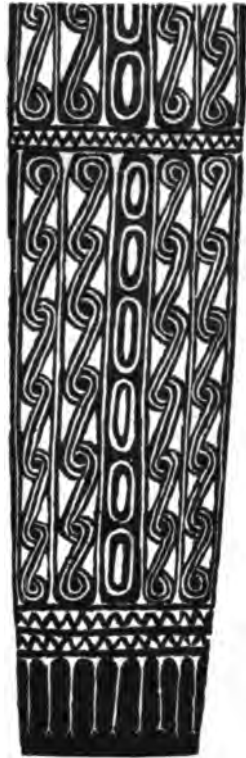


FIG. 53.



FIG. 54.

FIG. 53.—Rubbing of the lower half of the decoration of a club (type II.) in the Cambridge Museum (o. III. 89. x 25). One-third natural size. The triangular spaces and the centres of the ovals are coloured red, the rest of the intaglio portion is white.

FIG. 54.—Rubbing of the decoration of a club (type I.) in the Author's possession. One-half natural size.

band, in the one next to it to the right, and in the outermost band to the right we get three consecutive stages of degeneration.

A beautiful variation of the same motive is to be found on a spatula (fig. 55), with a four-sided handle, in the Cambridge Museum. If the first row of this figure be compared with the outer ones of fig. 54, it will be

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seen that they are essentially similar, except that the curved, white lines in the former are much the longer; but in the second row of fig. 55 the components of the pattern are practically distinct. The pattern, instead of being a white one on a black ground, is now a black one on a white ground.

In a carved border round the top of a betel-pestle in the Cambridge Museum (fig. 56), the bird's head scroll has become simplified, and at the

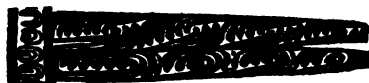


FIG. 55.

Rubbing of two of the sides of a four-sided handle of a spatula in the Cambridge Museum (o. iii. 89. x. 3). One-third natural size. This spatula has a small bird on the top.



FIG. 56.

Rubbing of the pattern round the upper margin of a betel-pestle in the Cambridge Museum (1893). One-third natural size.

same time developed into a more convolute scroll. A very degraded example is seen in the upper band of fig. 82.

The eyes of the original birds are often omitted, as in figs. 53, 55, 64, and then there is a tendency for the pattern to become still more divergent. Examples of this may be found in the spatula, fig. 57, the pattern on which is only a variant of fig. 53. The duplication of the lines, with a slight reduction and shifting of the hooks, results in a guilloche, or rope-pattern, as on a club (fig. 58) in the Edinburgh Museum ('78. 59. 12). On a club from D'Entrecasteaux (fig. 59), in the same Museum (1883, 91. 31), this pattern has undergone further degeneration, and the curved lines of each head are separated by single or double oblique lines. A comparison of this figure with the preceding will show that these lines correspond to those at the ends of the scrolls in fig. 58, the simplifying of the scrolls has permitted them, as it were, to slide, so that their ends come opposite one another.

A variant of the guilloche occurs on a club (fig. 60) in the Cambridge Museum, but here the black lines are continuous, and there is a tendency towards a zigzag pattern; in the band (fig. 61) above the grip of the handle of the same club this appears to have been actually arrived at; and

I am inclined to believe the central and lowest zigzags to be derivatives

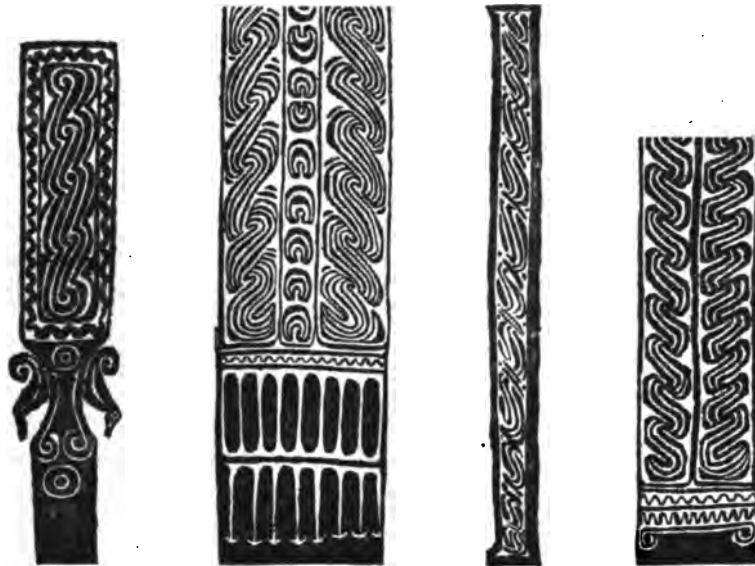


FIG. 57.

FIG. 58.

FIG. 59.

FIG. 60.

FIG. 57.—Rubbing of the handle of a spatula in the Author's possession. One-half natural size.

FIG. 58.—Rubbing of the lower three-quarters of the decoration of a club (type II.) in the Edinburgh Museum (78. 59. 12). One-third natural size.

FIG. 59.—Rubbing of part of the decoration of a club (type III.) from D'Entrecasteaux, in the Edinburgh Museum (83. 91. 31.). One-third natural size. (Cf. figs. 77-79, 83.)

FIG. 60.—Rubbing of lower third of the decoration of a club (type I.) in the Cambridge Museum (O. III. 87. 69). One-third natural size.

from the main design on the club, whereas the uppermost zigzag is probably the ordinary form of that pattern which is so constantly found in the decorative art of British New Guinea. In the Trocadero Museum, in Paris, there is a spatula (30142), with a zigzag pattern, which is evidently a derivative from the scroll pattern.



FIG. 61.

Rubbing of decoration on handle of the same club as fig. 60.

Allied to the guilloche is a twisted, or figure-of-eight pattern (fig. 86); sometimes figures-of-eight, or reversed coils, occur singly (figs. 84, 85, 91) or in disconnected series (fig. 83).

On a coconut water-vessel (fig. 62 and Album, Plate 277, No. 3) from the D'Entrecasteaux Group in the British Museum (CC. 1697), the guilloche is much compressed, and the narrow loops thus caused appear to have suggested the narrow, elongated rings, which adorn other portions of the same vessel.

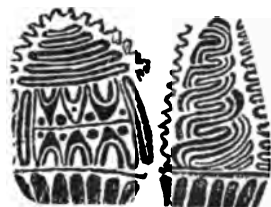


FIG. 62.

Rubbing of part of the decoration of a coconut water-vessel from the D'Entrecasteaux, in the British Museum (CC. 1697). One-third natural size.

Fig. 63, which is a rubbing of a spatula in the Cambridge Museum (o. III. 93. 71. 10), is an elegant

example of an attempt to take advantage of the symmetry



FIG. 63.



FIG. 65.



FIG. 66.



FIG. 64.

FIG. 63.—Rubbing of the handle of a spatula in the Cambridge Museum (o. III. 93, 71. 10). One-third natural size.

FIG. 64.—Rubbing of the decoration of a club (type II). One-third natural size.

FIG. 65.—Rubbing of the handle of a spatula in the Museum of the London Missionary Society. One-half natural size.

FIG. 66.—Rubbing of the upper three-fifths of the central panel of a club (type II.) in the Cambridge Museum (o. III. 92. 79). One-third natural size.

caused by the reversal of the pattern, as in fig. 52. Another example occurs on a club (fig. 64), but the symmetry is not consistently carried

out. A more interesting example occurs on a spatula (fig. 65) in the Museum of the London Missionary Society, in which not only is there an attempt at symmetry, but owing to an absence of eyes there has been nothing to break the continuity of the longitudinal lines, and they have all become united, and this has led to the scroll pattern becoming, so to speak, unravelled.

The central band pattern (fig. 66) of a club in the Cambridge Museum is probably an extreme example of the concrescence in the middle line of certain elements of the scroll pattern.

Occasionally the scrolls are irregularly arranged in a band area, and I have noticed a decided tendency towards an erratic treatment of patterns when the band to be decorated is wider than usual. In fig. 67 we have an interesting example of an effort to decorate a small superficial area. Here there is nothing to guide or



FIG. 67.

Rubbings of both sides of a float for a fishing net.
In the collection of Mr. J. M. Campbell.
One-half natural size.

restrain the artist, except the boundary of the float, and the design has evidently wandered. On canoe carvings and some other objects there are usually structural or vestigial features, round which the design may be said to crystallise, and in these cases the pattern is approximately symmetrical.

2. *Patterns derived from Birds' Heads and Necks.*

There is a distinct variety of the bird's head motive which may conveniently be termed the "bird's head-and-neck pattern." In the former the head and beak are alone depicted; in the latter the neck or an extremely attenuated body is also represented. Naturally there are some carvings in which this distinction cannot be very readily made.

A beautiful example of the head-and-neck design is to be found on a

turtle-shell spatula (fig. 68) in the British Museum (51. 1-3. 160) a sketch of it will be found in "Album" (pl. 281, No. 4). On it are carved eight birds' heads, with interlocking necks or beaks; along the



FIG. 68.

FIG. 68.—Rubbing of the handle of a turtle-shell spatula from the Louisiades, in the British Museum (51. 1-3. 160). One-half natural size.



FIG. 69.

FIG. 69.—Rubbing of part of the decoration of a club (type III.). One-third natural size. The zigzag lines run across the club, and the transverse band, thus formed, is divided into bands parallel to the long axis of the club. Three of these are shown in the figure. (Cf. fig. 74.)

lesser curvature of the large crescent is a pattern which has probably been suggested by the interlocking of the beaks of the birds. This pattern resembles one found on a Trobriand drum in the British Museum (fig. 90), but I am not at all sure that it is the same pattern.

The heads and necks may serially follow one another without being connected, as in fig. 69; and in the second band from the top of fig. 74 the bird's head has become simplified into a coiled loop design. A spatula (fig. 70) in the Dublin Museum (1887. 733) has an elongated oval handle with a central slit-like perforation; this is decorated on the one (A) side with recognisable discontinuous birds' heads; but on the other, (B), the birds' heads are so drawn that they are unrecognisable as such, but the white spaces between the heads, in the hook of the beaks, and the rings of the eyes, alone constitute the pattern.

More frequently the beak of one bird interlocks with the neck of the

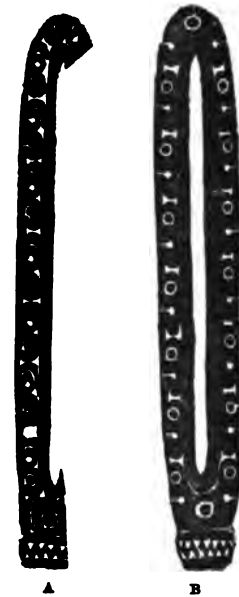


FIG. 70.

Rubbings of the handle of a spatula in the Dublin Museum (1887. 733) from the "Louisiade Islands." One-third natural size.

bird in front as in the outer bands of fig. 71, which is a rubbing of one side of a spatula in the British Museum (C. I. E. 1886). The central band of this figure is evidently derived from the hooks of interlocking beaks or necks. In some cases, as in this figure, it is quite impossible to distinguish between beaks and necks; in other patterns the distinction is fairly obvious.

There is in the Dublin Museum (1884. 974) a spatula with a three-sided handle; on one side (fig. 72 A), we have a degraded interlocking head-and-neck pattern, in which the eyes are omitted; on another side this pattern is more continuous, while on the third we have



FIG. 71.



FIG. 72.



FIG. 73.

FIG. 71.—Rubbing of the handle of a spatula in the British Museum (C. I. E. 1886). (Cf. "Album," pl. 281, No. 10). One-third natural size.

FIG. 72, A, B, C.—Rubbings of the three sides of the handle of a spatula in the Dublin Museum (1884. 974) from the D'Entrecasteaux. One-half natural size.

FIG. 73.—Rubbing of the upper end of a club (type III.) in the Dublin Museum (1893. 628. A). One-third natural size.

a broad zigzag (fig. 72 C), which looks very much like a final stage of degeneration of this motive.

Very frequently we find two birds' heads united by their necks. In fig. 73, which is the decoration of a club in the Dublin Museum (628. A. 1893), there are several varieties of this motive. Those on the right hand side, though highly conventionalised, are less modified than those on the

left. In some cases the beaks have broken away from their heads, and in the lowest design on the left side each is represented by two small marks. I have a series of spatulas from the Trobriands or Woodlarks, the brackets of which exhibit a parallel series of degenerations. The same design often occurs on canoe carvings, &c., as well as an analogous one, which is formed by the union of two birds' beaks.

It would be easy to multiply instances of the vagaries of the favourite bird's-head pattern, but I must content myself with only a few other examples.

In the second row of fig. 74 we see a bird's head passing into a coiled loop, but there are other loops which are more or less continuous. Very similar to these is the uppermost band in fig. 69; this pattern reminds one of that pattern which has been arrived at on the Toaripi mask, pl. VII., fig. 116, but of course



FIG. 74.



FIG. 75.



FIG. 76.

FIG. 74.—Rubbing of the decoration of the other side of the club of fig. 69. One-third natural size. The block is turned round to show the patterns more clearly, the zigzag bands in reality run across the club.

FIG. 75.—Rubbing of the handle of a spatula in the Cambridge Museum (o. III. 71-7). One-half natural size.

FIG. 76.—Rubbing of the decoration of a club in the Dublin Museum (628. n. 1893). One-third natural size. The handle of this club is essentially of type III., whereas the blade gently tapers to a blunt point, and so resembles type I. The decoration forms a central band across the club. The figure is the right way up.

the latter has had an entirely different origin. Looped coils grouped in a continuous or discontinuous linear series form a not uncommon pattern in the D'Entrecasteaux and island groups to the east. The discontinuous looped coils in the central band of fig. 71 are really double;

being derived from two interlocking elements (beaks or necks); those in the second row of fig. 74 are single, as each is developed from only one head.

Looped coils, apparently developed from birds' heads (as in fig. 74) are found on a spatula, fig. 75, in the Cambridge Museum (o. III. 93. 71-7), which probably came from the Trobriands or Woodlarks, and may be compared with fig. 84, a Trobriand spatula in the British Museum. I cannot say whether the spirals in the last spatula are modified looped coils; there is nothing improbable in such a metamorphosis taking place.

The spirals of this district probably have a varied origin. Fig. 76 is a reduction of the decoration of one side of a club in the Dublin Museum (628. D. 1893); in the lower right-hand corner is a design, which is a further simplification of that in the lower left-hand corner of fig. 73; the central mark in fig. 76 is the relic of the four which occur in fig. 73, and these



FIG. 77.



FIG. 78.



FIG. 79.

FIG. 77.—Rubbing of the central longitudinal band of a club (type III.) from the D'Entrecasteaux, in the Edinburgh Museum (1883. 91-31). One-third natural size.

FIGS. 78, 79.—Rubblings of part of the central band of the same club as figs. 59, 77, but on the other side.

are the disrupted remains of the beaks of the two birds. If the beaks have degraded, the eyes have developed, or, at all events, one of them has, and forms a definite spiral. The other spirals in fig. 76 are serial repetitions of the involved bird's eye, the limitation of these within narrow bands cause their elongation, and from these we are led to the concentric ovals. Ovals are commonly inserted in the central panel or band of clubs, as in fig. 53,* All the concentric ovals met with in this district may not have been arrived at in this manner, but those in fig. 76 appear to have had this origin.

There are two clubs in the Edinburgh Museum from the D'Entrecasteaux Group; one (1883. 91-31) belonging to type III. has on one side a central band (fig. 77) which contains a series of extremely modified paired birds' heads united by their necks; probably owing to the narrow space at his disposal the artist omitted the typical curvature of the beak. Figs. 78 and 79

* Cf. also, "Album," pl. 295, Nos. 1 and 2, and Ratzel, "Völkerkunde," vol. ii., p. 242.

illustrate others from the opposite side. The other club (1883. 91-32) is of the same type; its central band is occupied by a distinctive looped pattern (fig. 80). I have no doubt that this also



FIG. 80.

Rubbing of the upper three-fourths of the decoration of a club from the D'Entrecasteaux, in the Edinburgh Museum (1883. 91-32). One-third natural size.

is a bird derivative. In the central part of fig. 77 we see one way in which this pattern could arise, and I have other rubbings which support my conclusion. A similar pattern, but with single instead of double lines, occurs in the Papuan Gulf, *cf.* the arrow-carving in fig. 46i; it also occurs on certain Australian boomerangs, as well as in other parts of the world. This is a good example of an essentially identical pattern having several distinct origins.

The design shown in fig. 3, Taf. v. of Finsch's "Ethnological Atlas," is also a bird derivative. Dr. Finsch kindly permitted me to make rubbings of this spatula which he collected in Normanby Island.

Eye-markings occur in profusion on some clubs; on one in the Dublin Museum there are two groups in nine rows containing 90 and 81, respectively, besides other designs; and one in the Cambridge Museum (o. III. 2) also has two groups in seven rows containing 100 and 108 eye-markings, respectively. A Trobriand spatula in the British Museum (fig. 85) is also decorated with eye-markings. These eye-markings may also be regarded as having been inspired by the bird motive, but it does not follow in all cases that they are actually eyes.

(B). THE BIRD AND CROCODILE MOTIVE.

A favourite design for the termination of handles of paddles, clubs, axes, spatulas, and as an accessory design on other objects, is the association of a bird with a crocodile's head. The mouth of the latter is open, and is

represented as if seizing the bird. I have been unsuccessful in finding out what bird is intended, presumably it is the frigate bird, but this will not account for the frequent representation of a crest (Pl. XII., figs. 184, 185, 188, 201). Occasionally the hornbill appears to have been confounded in the artist's mind with the more usual bird (Pl. XII., figs. 190, 203). In Pl. XII., figs. 187 and 189, quite different birds are indicated, but I am by no means sure that these were intended to be distinct from the ordinary bird.*

I think we may regard this design as being characteristic of the Moresby Group and of the neighbouring mainland, but it is not absolutely peculiar to these localities.

On Plate XII. will be seen a collection of twenty-two variants of this motive. I could easily have presented as many more, but these will suffice to illustrate a typical series of variations; the numbers in the following paragraphs refer to this Plate.

In one or two instances known to me what appears to be the scales or scutes of the crocodile are indicated as in fig. 184. In this figure, and in fig. 202, the eye and upper jaw of the crocodile are repeated as a pattern; I shall allude to this subsequently. The crocodile's eye always persists in a recognisable form; sometimes it is small and simple, as in fig. 201; more often it is relatively very large, and forms a sigmoid scroll, as in figs. 186, 195, 200. A peculiar modification is found in figs. 192, 193; but on the other side of the last spatula the eye device is converted into a bird's head.

The jaws are rather more often edentulous than provided with teeth. Possibly the pattern on the upper jaw of fig. 187, and on both jaws of fig. 201, are suggestive of teeth. Either the upper jaw (fig. 188), or the lower jaw (fig. 204), or both jaws (figs. 190, 203) may be hooked. In a paddle (fig. 194) in the London Missionary Society's Museum, and a very similar one in the Oxford Museum, the upper jaw may be inflected as a bird's head. A tongue is rarely absent (figs. 197, 199), it may be short or long, it is usually straight, but may be bent (figs. 189, 203, 204), and the tip

* Dr. H. O. Forbes informs me that he believes the cockatoo is sometimes represented, and he made a memorandum in his note-book, when in the Louisiades, that certainly the duck was represented there.

may be converted into a bird's head (fig. 201). I know of two examples in which it is toothed (figs. 192, 196); in some cases (figs. 185, 202) it is separated from the crocodile, and joined on to the bird. One often finds examples in which the jaws of the crocodile are represented by several lines, as, for example, a British Museum club (Ratzel II., p. 242), and the first spatula (Brit. Mus. + 1587) on p. 261, Ratzel II.; also Pl. XII., fig. 189.

The bird is almost invariably provided with a hooked beak, and sometimes (figs. 195, 200, 203) this is the most prominent vestige of the bird. Very frequently a crest is added. Typically the bird has a neck and body, but never, so far as I am aware, has it a tail or legs. Plate XII. illustrates numerous degenerations of the bird: first, the body is lost, as in most of the figures; the neck is absent in figs. 191, 193, 195, 200, 204; while in figs. 196, 199, only the eye is left. The latter figure calls for special comment: this spatula was given to me by the Rev. J. Chalmers, and, so far as I know, it is an unique variety. It is flat, perforated, and both sides are alike; the central design which is enclosed in a kind of frame, consists of a degraded bird and crocodile; the tongue of the latter is absent, and the toothed jaws, enclose at their tips the eye, which is the last vestige of a vanished bird; so far this figure may be compared with fig. 196. The artist had apparently lost sight of the bird, and knowing there ought to be one finished off the spatula with an extra bird, the beak of which is, however, non-typical. In a Dublin spatula (fig. 191) an analogous process has taken place, the original bird is indicated by such a monstrous vestige that the artist added a small bird in front, the wing of which is somewhat dislocated. There is no apparent reason for the front bird in fig. 190. The extra bird in fig. 186 is evidently inserted to utilise the wood of the handle below the original bird's head, and the lower eye in fig. 198 is merely an artistic device to utilise a blank space.

There is a large paddle-shaped implement from Wari (Teste I.) in the British Museum (+ 3840), about 2500 mm. long (8 feet). Partington, in his "Album," pl. 293, No. 1, calls it a "sago-mixer"; there is a similar object in the Museum of the London Missionary Society, which is called a "steering-paddle"; both have elaborately carved handles, with the bird

and crocodile design. In the former [the recurved beak of the bird terminates in another bird's head, as does also the tip of the bird's wing; birds, too, have also, so to speak, invaded the crocodile, and there is a bird design above the crocodile's snout. This latter, in the London Missionary Society's Museum, consists of two birds' heads united by their necks.* This is also the origin of the bar, with an eye at each end above the crocodile's upper jaw in Pl. XII., fig. 190.

The last stage in the decadence of this motive is shown in Pl. XII., fig. 205: paddles with handles like this are to be met with in many collections.†

Other figures of this motive will be found in Mantegazza, Finsch, &c.‡

(C). THE ZOOMORPHS OF THE DISTRICT.

It is somewhat surprising to find that the western and south-eastern limits of the coast line of the British Protectorate should be characterised by zoomorphs, while the central district is practically devoid of them.

We may safely regard the bird motive as being the most important in this district. Unfortunately we have no direct evidence as to what the bird is which is so constantly depicted, but in all probability it is the frigate bird (*Fregetta aquila*). This may be regarded as the emblematic bird of the Western Pacific; it enters into the art of the Pelew islanders, to a less extent it is employed in the Bismarck Archipelago, but it is predominant in the Solomon Islands. Dr. Codrington§ informs us that at Florida, in the Solomon Group, they pray as follows to "Daula, a *tindalo* generally known and connected with the frigate bird [a *tindalo* is the ghost or spirit of a man endowed with *mana*, that is, superhuman power or influence]. 'Do thou draw the canoe, that it may reach the land; speed my

* Cf. the paragraph in which fig. 73 is described.

† Cf. "Album," pl. 284, No. 1.

‡ "Studii antro. ed etno. sulla Nuova Guinea," Arch. per l' antrop. e la etnol., vii., 1877, pl. 8, No. 614 (and D'Albertis, i., p. 191). Finsch, "Ethnol. Erfahr.," Annal. k. k. naturhist. Hofmus. Wien., iii., 1888, pl. xix., fig. 3; and in the "Album," pl. 284, No. 2; pl. 285, No. 1; pl. 295, No. 1.

§ "The Melanesians," 1891, p. 145.

canoe, grandfather, that I may quickly reach the shore whither I am bound,' &c. . . . Daula is invoked to aid in fishing: 'If thou art powerful, *mana*, O Daula, put a fish or two into this net, and let them die there.' After a good catch he is praised." On p. 180 we read: "The sacred character of the frigate bird is certain; the figure of it, however conventional, is the most common ornament employed in the Solomon Islands, and is even cut upon the hands of the Bugotu people [also *l. c.*, p. 257]; the oath by its name of *daula* is solemn and binding in Florida, where Daula is a *tindalo* . . . 'many and powerful to aid at sea are the ghosts which abide in these birds.' Who Daula was, when he was a living man, has 'passed far away from any historical remembrance'" (p. 126).

Occasionally the hornbill (*Buceros*) is represented, and in some carvings the frigate bird and the hornbill appear to be confounded together, as, for example, in Pl. XII., fig. 190. We are also ignorant what ideas are attached to the hornbill in British New Guinea. Gill (1876, p. 250) saw some natives in Redscar Bay wearing the beak of the hornbill "as horns on each side of the head"; D'Albertis procured a tamed one at Dudi (vol. I., p. 143), and figures some beaks which were used as a headdress at Orangerie Bay (II., p. 199). Moresby (p. 177) records the wearing of this "specially Papuan adornment" in Hall Sound. Chalmers and Gill (1885, p. 289) figure a Hula man wearing a beak on his forehead, and similar specimens occur in museums. Basil Thomson (1889, p. 528) says that wearing the upper mandible of a hornbill in the hair is a sign that the wearer has killed someone. C. M. Pleyte Wzn has collected much information about this bird in his paper, "Pratiques et Croyances relatives au Bucéros dans l'Archipel Indien," *Rev. d'Ethographie*, IV., 1885, p. 311; V. 1886, p. 464, in which he shows that the natives believe that the hornbill brings good-luck, protects from harm, and hinders misfortune from coming. "One may explain in an analogous manner [to preserve from danger in travelling] the custom of the Papuans, especially those who inhabit the coasts of Humboldt Bay, of placing a wooden image of the hornbill at the bow of their canoes. If our hypothesis is well founded, it would naturally here protect from the dangers of the sea" (*l. c.*, p. 318).

The association of a bird (normally the frigate bird) with a crocodile is

very characteristic of one province in this district. I have made inquiries, but have failed to elicit any information on this point.

I have tacitly assumed that the animal represented so frequently in the carvings of this district is a crocodile; but of this I have no direct proof. I have given several instances of the more or less sacred character of the crocodile amongst the Torres Straits islanders, and Chalmers has done the same for the Papuan Gulf natives. Uhle* has amassed a considerable body of evidence on this subject, more particularly from the Malay Archipelago, and has demonstrated the prevalence of the crocodile motive in the decorative art of Netherlands New Guinea.† Dr. Codrington‡ found that at Florida, in the Solomon Group, “they invoke also Bagea as their grandfather; the word *bagea* meaning shark, and any *tindalo* that has taken up its abode in a shark, or is represented by one, being called Bagea.” On p. 179 are several proofs of the relations between ghosts and sharks in the Solomon Islands. “These sharks also were thought to aid in catching the bonito, for taking which supernatural power was necessary; . . . though all sharks are not venerated, there is no living creature so commonly held sacred as a shark.” The crocodile may also be sacred. If the Melanesian regard for the frigate bird has spread to the Massims, it is probably that the belief in sacred sharks might accompany it. If so, judging from what we know to have occurred elsewhere, there may have been a confusion of the crocodile cult with the shark cult, or even a transference from the one to the other.

For a *resumé* of the lizard cult in Oceania, see M. Meyners d’Estrey.§

In the descriptions of the spatulas and clubs of this district will be found allusions to the representations of the following animals:—cuscus, boar or dog, lizard, and various kinds of mantis, in addition to the crocodile and birds above mentioned.

* “Holz- und Bambus-Geräthe aus Nord West Neu Guinea,” Königl. ethnogr. Mus. z. Dresden, vi., 1886, p. 6.

† Cf. also, A. B. Meyer, 1889, p. 6.

‡ “The Melanesians,” p. 145.

§ “Étude ethnographique sur le Lézard chez les Peuples Malais et Polynésiens,” L’Anthropologie, iii., 1892, p. 711. (Cf. also M. Uhle, *loc. cit.*, p. 6.)

When dealing with the zoomorphs of the Torres Straits and Daudai District, I discussed the relation of totemism to decorative art. I have failed to obtain any information on this point for the district now under consideration, but I hope, now that attention has been directed to it, inquiries will be made before it is too late, and that the results will be put on record.

The carving of gressorial Orthoptera (mantis, stick-insect, &c.) by the natives (of the Moresby group?) is particularly noteworthy, especially as we find that in New Britain (Neu Pommern), and Duke of York Island (Neu Lauenburg), the people are divided into two marriage classes, which are named after two mythological personages, one is wisdom personified, and the other is his opposite. On Duke of York Island the totems are respectively a leaf-insect and a mantis. No man may marry or have connection with a woman of his own class.* It is tempting to suspect that the Melanesian immigrants to this district, or some of them, have, or have had, a similar belief and custom, and that this is enshrined in their decorative art. Dr. Codrington, however, utters a note of warning against seeing totemism in all superstitions about animals or plants.†

III. Certain Implements of the District.

1. LIME SPATULAS.

The most attractive of the small objects from this District are the spatulas which are used in conveying lime to the mouth from gourds when chewing the betel-nut. These are usually made of ebony, and are cleverly and variously carved; as a rule the design is picked out by the intaglio portions being filled up with lime, the contrast of the white and black being very pleasing. Most of the older specimens are extremely well carved, but there is now a

* Rev. B. Danks, "Marriage Customs of the New Britain Group," *Journ. Anth. Inst.*, xviii., 1889, p. 281.

† "Totems in Melanesia," *Rep. Austral. Assoc. Advanc. Sci.*, ii., 1890, p. 611; *cf.* also his "The Melanesians: Studies in their Anthropology and Folk-Lore," 1891, p. 32.

tendency for recently made spatulas to be turned out in a more perfunctory manner. Degeneration in artistic excellence is the almost universal result of the influence of the white man. Time is now beginning to mean money to these people, and there is a gradually increasing feeling among natives who have become influenced by white-men, to be content with utensils which are undecorated, or of which the ornamentation is scamped. The natives have, by this time, sold a considerable portion of their old and well-carved objects, and they find that the trader does not insist upon perfection in more modern objects. As far back as 1885, Dr. Finsch found that even shields were made to sell to the white-man (*cf.* a specimen in the Museum in Rome).

The natives have let their fancy have full play in the carving of their spatulas, consequently the variation which obtains is very great. It is impossible to give here a thorough classification and description of these objects, but the following notes may prove of service to collectors, or to those who may care to study the matter in more detail. I may add that I have before me photographs, sketches, and rubbings, of about 350 spatulas.

These objects are greatly traded about among the natives; collectors have been very careless in indicating the places where they obtained their specimens, and none seem ever to have ascertained where they were made; consequently it is very difficult to allocate different types to their proper localities. I have done my best with the material at my command, and I must leave it to others to verify or to modify my conclusions.

The native name for these objects varies in every one of the numerous languages which are spoken in the district; by Europeans they are often called "chunam spoons," but they are not spoons, and there is no reason for introducing into the English language an Anglo-Tamil term for "quick-lime."

PROVISIONAL CLASSIFICATION OF SPATULAS.

a. CLAPPER :

- (1) Unbracketed.
- (2) Single bird's-head bracket.
- (3) Double birds'-head bracket.

β. SIMPLE HANDLES :

- (1) Elongate.
- (2) Panel.
- (3) Tapering.

γ. COMPLEX HANDLES :

- (1) Single-ridged.
- (2) Slit.
- (3) With projection in perforation.
- (4) Solid, lens-shaped.
- (5) Four-ridged.

δ. ANIMAL CARVINGS :

- (1) Birds.
 - (a) Single bird's head.
 - (b) Serial birds' heads.
 - (c) Grouped birds' heads.
 - (d) Irregular birds' heads.
 - (e) Bird-complex.
- (2) Bird and Crocodile.
- (3) Mammals.
- (4) Lizard.
- (5) Mantis.
- (6) Undeterminable.
- (7) Human figures.

ε. UNCLASSIFIED.*a. Clapper.*

The most common form of spatula is that which may be termed the "clapper," owing to the fact that the handle is split, and when struck on any object makes a sharp clacking noise. It is said that the natives are very fond of emphasising their conversation by striking these spatulas on their legs. (Illustrations of clappers will be found on pl. 280, No. 1 (Moresby Island), and pl. 312, No. 1 (Lousiades), of the "Album"; Finsch, 1888, "Eth. Erf." pl. xix., fig. 7 (Milne Bay); and Ratzel, "Völkerk.," II. p. 261 (Nos. 5 [+ 2454, B.M.] and 7, the latter was collected by Huxley in the "Rattlesnake" from Coral Haven, Lousiades [5394, B.M.]).

The apex is almost invariably carved to represent a face or head, though of what I cannot decide to my own satisfaction, Mr. Balfour* suggests that it is a bird derivative. The handle is usually decorated with some form of the scroll-pattern, included within longitudinal

* Balfour, H. (1893), "The Evolution of Decorative Art," pp. 70-72, fig. 28.

bands, analogous to those on the clubs. The apex and neck are usually separated from the rest of the handle by a zigzag band; except for these bands, the handle is sometimes quite plain.

The neck may or may not be provided with brackets, the latter fall into two classes—(1) those with a bird's head on each side, as in fig. 63, which is, however, degraded; and (2) those with two birds' heads united by their necks. In fig. 85, the bracket is covered with irregular scrolls.

A few spatulas, evidently belonging to this type, are not slit, and they pass by insensible gradations to the next class.

The clapper is widely distributed over the District. I suspect that the following generalisations are correct, in the main:—

- (1) Unbracketed; handle plain or with typical scroll patterns, broad, thick; blade, usually broad, and obtusely rounded.

From Louisiades to South Cape, D'Entrecasteaux, Woodlarks, and Trobriands. Generally distributed, but more characteristic of the Moresby and Louisiade Groups.

- (2) Single bird's head bracket; handle plain or with scroll, and occasionally loop-coil patterns; the blade is longer and narrower than in the preceding, and usually tapers more gradually.

Milne Bay, Bentley Bay, Moresby Group, D'Entrecasteaux, Woodlarks, and Trobriands. Characteristic of the Moresby and Woodlark Groups.

- (3) Double bird's-head bracket; handle usually plain, the sides of the handle are, as a rule, cut square, and not bevelled off, as is usual in the first division, and to a less extent in the second, the apex very often is raised in the median line; the bracket is very characteristic; the carving is deep and clean-cut; the blade as in the last.

Woodlarks and Trobriands. Practically confined to these Groups.

β. Simple Handles.

This class admits of further subdivisions into—

- (1) Elongate handles often with a rounded end, like those figured in the "Album," pl. 281, No. 7; Finsch's "Atlas," pl. v., figs. 2, 3; usually decorated with scroll patterns (fig 71).

They appear to come from the Louisiade and Moresby Groups.

- (2) Panel-like handles, oblong, usually cut square at end, and of greater width than the blade; scroll patterns (figs. 57, 65, 84, 86).

Scattered over whole district, but perhaps more characteristic of the D'Entrecasteaux, Woodlarks, and Trobriands. In the two latter Groups small birds may occur as brackets (fig. 84).

- (3) Handle often slightly wider than blade, in which case it gently tapers to the blade; end straight or rounded; decorated with bird-scrolls (fig. 75), loop-coils, &c., which usually form a symmetrical design.

Woodlarks and Trobriands.

γ. Complex Handles.

- (1) Handle flattened with a low, central, longitudinal ridge; lateral flanges usually carved with scrolls or bird-derivatives; usually a projection of some kind at the end (fig. 51).

Milne Bay, D'Entrecasteaux, Woodlarks, Trobriands.

- (2) Elongated handle, with a long, central slit, which may be surrounded by a bead, plain or with spirals, scrolls, loop-coils, zigzags, &c.; the top may be rounded, or with a projection, usually greatly modified bird derivatives (fig. 70).

Woodlarks, Trobriands, and from the D'Entrecasteaux, and their neighbourhood, including Milne Gulf.

- (3) Perforated handle, with a bar through the slit or central perforation, or a projection into it.

A specimen in the Dresden Museum (6420), bridges over 2 and 3; this leads on to a specimen in the British Museum, with a shorter handle (Ratzel, II., p. 261, No. 4). In the British Museum are specimens (9785, + 1710), with a round aperture, and a central tongue (broken in the former); the latter is surmounted by a bird, and with two birds' heads below. In the Liverpool Museum (5, 8, 80, 59) is a similar specimen, with a large oval aperture, which is nearly filled up by a flat free projection. A spatula in the British Museum (+ 1582) belongs to the same series, and it bears some resemblance to the float figured in the "Album," pl. 278, No. 6. A spatula with an urn-shaped handle, in the Oxford Museum, is another modification.

- (4) Solid lens-shaped handle.

The last specimen shows how the perforation may nearly disappear; it has quite disappeared in other spatulas, as in a British Museum example; but the central bar appears to have left its trace in a short central ridge—there is a similar specimen in the Sydney Museum, and one in the Milan Museum (110. 51)—or in a central round flat button, British Museum (+ 615), and Cambridge Museum. The handle proper is often supported by two birds' heads, and instead of a bird at the top, there may be a simple device, or merely a peg. There are two stages of this phase in the Milan Museum (110. 54, 110. 53), one in the British Museum (51. 1–3. 105), and two in the Dublin Museum (1891. 804–805).

Lastly, there are in several collections some spatulas, with solid, round, or oval lens-like handles, usually decorated with a star-like design, which I regard as the last term of this series.

There are a few other spatulas known to me, which may be classed with this group, which present various modifications. The more elaborately carved examples of this group of spatulas bears so many points of resemblance to some of the intricate fishing floats, that I

suspect the motives have been transferred from the latter to the former.

The Cambridge and Milan spatulas probably came from the Woodlark Archipelago but I believe that the headquarters of the more elaborate specimens is the D'Entrecasteaux Islands.

(5) Elongated; narrow handle, with four ridges*

This is a very well-marked type; it is always long and narrow, and sometimes these spatulas are of great length; the handle springs from a kind of bracket, and here usually there are small faces; the handles are plain, but minute punctures may run along near the edges of the ridges. The ridges of the flat side of spatula are longer than the others, and unite round at the apex.

Woodlarks and Trobriands. A few specimens have been obtained from elsewhere: for example, Finsch got his at Goulvain Island, D'Entrecasteaux; but I believe these to be imports.

8. *Animal Carvings.*

Although as a matter of fact nearly all the decoration of the spatulas already enumerated is ultimately derived from animal, mainly bird, motives; yet as a whole the ornamentation is merely to decorate a given form or surface. In the following divisions the animals themselves constitute the handle; naturally it is not always possible to decide whether a particular spatula should be placed in one of these divisions or in another group.

(1) *Birds.*

(a) Handle formed by a single bird.

I know of only two examples of this division—one in the Berlin Museum (vi. 3546) is an indeterminate bird; the other in the Cambridge Museum (o. III. 94. 46A) is evidently intended for a Hornbill (*Buceros*). Neither have a locality.

* Cf. Finsch, 1888, pl. xix., fig. 4.

(b) Birds' heads in series.

There are a few examples of birds' heads being arranged in a linear manner (as in fig. 51).

Probably mainly Louisiades.

(c) Birds' heads symmetrically grouped, supporting a crescentic handle.

The crescent is usually perforated by a row of small holes, and is typically supported on the blade by two birds' heads; other birds' heads may occur, sometimes forming quite a complex design (fig. 68).^{*} Often made out of turtle-shell.

Louisiades.

(d) Birds' heads irregularly disposed.

There is one example in the Dublin Museum (1893. 19) from the Louisiades, another in the Cambridge Museum, probably from the Woodlarks. Other specimens with no locality.

(e) A complex design, consisting of a terminal bird, and a complicated bird-bracket at the blade end of the handle; the handle is usually carved in bird-scrolls (fig. 87). Occasionally, as in a British Museum specimen (+ 1592), there is no surface decoration, but the design is indicated in a very elegant manner.

Moresby Group, Teste Island.

(2) *Bird and Crocodile.*

This is a favourite motive, and is subject to many degradations. Examples of it have been figured by Ratzel, II., p. 261, No. 1, and by Finsch, 1888, pl. xix., fig. 3, neither of whom have identified the design; the former is a very handsome specimen in the British Museum (+ 1587), containing several accessory birds; in the latter,

^{*} Cf. Macgillivray, I., p. 190.

from Milne Bay, the bird is greatly degraded. Six other examples will be found on Pl. XII., figs. 186, 191, 192, 193 195, 199.

Milne Bay, Moresby, and D'Entrecasteaux Archipelagoes. I know of two examples from the Woodlarks, but I do not consider this motive as being characteristic of them, nor does it appear to be a Louisiade design.

(3) *Mammals.*

Two or three Mammals are known to me—one, a Cuscus from South Cape, in the British Museum, has been figured in the "Album," pl. 281, No. 5. In the same collection (+ 3406) is another animal, which may be a dog.

(4) *Lizard.*

There is a beautiful example of a lizard with a large gular pouch, but without a tail, in the Cambridge Museum (O. III. 94. 46 B); it came from Milne Bay.

(5) *Mantis.*

A mantis occurs as the handle of a spatula from South Cape, in the British Museum: cf. "Album," pl. 281, No. 8; and probably the specimen, from the same museum, figured by Ratzel, II., p. 261, No. 6, is also a mantis.

In the Dresden Museum there is a fine spatula (4419) from D'Entrecasteaux, the handle of which is carved to represent a mantis. It is very interesting to notice that the ends of the first pair of limbs are turned into birds' heads, such a hold has this latter idea obtained over these people. Another spatula (4414) in the same museum has a somewhat similar handle; unfortunately no locality has been attached to this specimen, but the similarity of the design, and the occurrence of the peculiar -shaped marks renders it extremely probable that it comes from the same region.

(6) *Undeterminable.*

There are various specimens in several museums, which are evidently intended to suggest animal forms, but which I have found it impossible to identify.

A bird-complex has been figured by Ratzel, II., p. 261, No. 2 (British Museum + 1588), in which the main body of the handle looks like a fish's head; but I do not think it is one.

It appears that the animal spatulas, other than the birds and bird-combinations, come from the Moresby and D'Entrecasteaux Groups, and neighbouring coast.

(7) *Human Figures.*

Occasional spatulas, with a human motive, have been brought to Europe from various parts of the whole district; for some time I have suspected that these were mainly of Woodlark and Trobriand manufacture; lately I have obtained evidence which decidedly supports that conclusion, though doubtless the idea may be occasionally copied in other parts of the district. For example, there is in the British Museum a specimen from Milne Bay with only a head, the handle is perforated and decorated with scrolls.* In the Dublin Museum there are three specimens, one from D'Entrecasteaux (1884. 973), analogous to the last, but with a solid handle; another (1887. 729) with a flattened handle, with scrolls, and a very elaborate head-dress; and lastly, one from the Louisiades (1891. 809), which bears still more resemblance to the British Museum example, but the slit is partly filled up by two bird-scrolls, and the face is greatly modified.

There is a very great diversity in the character and features of these carvings. The legs may be present or entirely absent; the arms may be prone or flexed; the hands may be placed on the abdomen, on the chest, or held up, sometimes underneath the chin. One is figured in the "Album," pl. 312, No. 2, and another from Teste Island, in Finsch's "Atlas," pl. v., fig. 4.

* Cf. "Album," pl. 280, No. 2.

ε. *Unclassified.*

Nearly a tithe of the spatulas known to me do not readily fall into any of the arbitrary classes I have described above; but I do not propose to enter, at present, into a more detailed classification, as I have already described the most important series.

I may, however, allude to a small class of spatulas, which are combined with a pestle for pounding the betel-nut; the pestle may be at the end of the handle, or in its middle, as in a specimen in the British Museum (3318).*

2. CLUBS.

Sword-like clubs carved out of ebony, and engraved with designs picked out with lime, are also characteristic of this District. The following classification includes the most common types, but they have a tendency to merge into one another:—

I. Long lanceolate blade, with a long or short decorated surface, which may occupy as much as one-half or more of the blade, but it is often much less. The upper section of the blade, which commences immediately above the pattern, is marked off from the lower section by being in a slightly lower plane; it varies in length, often it is long and gently tapering, and may be two-fifths of the length of the whole blade.

This group of club may have two or three kinds of handle. In all there is a shouldered upper part or grip, which narrows towards the terminal part. The latter may be (A) a bird and crocodile design,† or some modified bird motive;‡ (B) a second triangle following the former; or (C) some other simple device, as for example a spear-point.§

An average length for this group is 1270 mm. (50 inches). It appears to extend from the mainland through the neighbouring groups of islands to the Louisiades.

* Cf. "Album," pl. 279, No. 4; also pl. 281, No. 6.
§ *Ibid.*, pl. 293, No. 2.

† Cf. "Album," pl. 295, No. 1.
‡ *Loc. cit.*, No. 2.

II. Long spatulate blade, which may pass into the former, but is much shorter and broader. The upper section of the blade is quite short and obtusely pointed, or often not much more than a semicircle. The pattern usually occupies the whole of the lower section of the blade.

The handle is subject to much the same kind of variation as the last.* The length is about two-thirds that of the former group. It appears to occur on the mainland, and on the Moresby and D'Entrecasteaux Groups.

III. Allied to the latter is a kind of club, in which the lower section of the blade gently broadens from the handle to its end, where it terminates squarely; its upper third is decorated with scroll designs. The upper section of the blade is very small, and gently rounded, and is often perforated by a series of holes.

The handle has a prominent guard, and its end is a thick semicircular enlargement with a thickened crescentic border.

An average length is 737 mm. (29 inches). This type of club is characteristic of the Trobriands and Woodlarks. It also is found in the D'Entrecasteaux Group; but the former Groups appear to be its headquarters.

Intermediate forms between groups II. and III. are labelled in museums as coming from the D'Entrecasteaux; sometimes a club belonging to type II. may have a handle ending as in the third type.

IV. There is a fourth type, in which the blade is fairly broad, with nearly parallel sides. The upper end is straight, or more generally deeply concave, and from its middle there projects a bar, which thus continues the long axis of the club. This may be short and decorated with feathers, as in a British Museum example (9831),† or it may bear a device, as in specimens in the Cambridge and British Museums;‡

* Cf. "Album," pl. 295, Nos. 3, 5; Finsch, "Ethnol. Atlas," pl. xi., fig. 4; Ratzel, vol. ii., pp. 242, 243.

† Cf. Comrie, *Journ. Anth. Inst.*, vi., 1871, pl. i., fig. 1; and "Album," pl. 294, No. 3.

‡ Cf. "Album," pl. 294, No. 4.

occasionally no bar is present, in which case I suspect its absence is due to breakage. The blade is in all cases decorated with variations of a strange design, of which a fair idea can be gained from Nos. 3, 4, 5, of pl. 294 of the "Album"; Comrie also figures the first of these, and Ratzel, vol. II., p. 243, the last. This last figure (British Museum, 4646) is to my mind suggestive of a stick insect, one of the Phasmidæ; but it is not easy to imagine what the others are intended to represent; they may be snakes, but I am rather inclined to regard them all as extremely modified suggestions of Gressorial Orthoptera. There often is a central scroll pattern in the design.

The handle is essentially similar to that of the first and second type of club, and may terminate in a triangular end, which is usually decorated with a face, or with a bird and crocodile design, as in two examples in the Cambridge Museum; a specimen in the British Museum (+ 597) has two lizards on the handle.

An average length is from about 815–915 mm. (32 to 36 inches). These clubs appear to come from the islands close to the mainland, or from the mainland itself.

V. Comrie* and Partington† figure clubs, the upper part of which recalls the carved staves which have been obtained in Torres Straits (fig. 14); but in the former there is no terminal bird's head, and the handles are quite different. There is one example in the Glasgow Museum (89. 77. z) which is surmounted by a human face, and the handle terminates with a degraded bird and crocodile design. The origin of the main design of these objects I take to be the same in all cases.

3. SHIELDS.

Concerning the shields of this district, Finsch‡ informs us:—"Of these shields there are two kinds, longish-oval and rectangular (about 1 m. high, and 40 cm. broad); they are decorated with raised carving and variegated

* Journ. Anth. Inst., vi., 1877, pl. i., fig. 5.

† "Album," pl. 295, No. 4.

‡ Samoafahrten.

colouring, and rank amongst the best productions of their art industry (p. 271). These shields extend from Milne and Bentley Bays (p. 271) to Teste Island" (p. 282).

The oblong shield is curved at each end, and is slightly convex from side to side. An average length is about 800 mm., and breadth about 420 mm. The handle is usually loop-shaped, formed of several pieces of rattan lashed together, and fastened into the wood, so that it appears on the middle of the face of the shield. In one specimen in the Berlin Museum it is cut out of the solid wood. The lower border is usually decorated with a fringe of cowries.

The ornamentation is confined to the upper third of the shield, and consists of flat carving in low relief, the design being picked out in black, red, and white. The remainder of the shield is smooth, and painted black, rarely a zigzagged border runs along the end of the shield.

No two shields are alike in their designs; but that figured by Finsch (1888, pl. xxv., figs. 2, 2*a*), from Wari, is very typical, as is also the one figured in the "Album," pl. 283, No. 4. It is not easy to describe the design, nor do I understand its significance. Sometimes the decoration is much simplified, but there is always a reminiscence of the more elaborate style, as, for example, the shield now in the British Museum, figured by Comrie* and by Ratzel.† Wilfred Powell‡ gives a figure of a shield from Rogea, which does not give me the impression of being a faithful representation. He says these shields are about three feet long and two broad, and "are hung on the outrigger of the canoe, to form a bulwark when fighting" (p. 15).

The oval, or elliptical, shields of this district vary somewhat in form and size. They are all convex from side to side, and but slightly so along their length. An average length is about 930 mm. ($36\frac{1}{2}$ inches), and the breadth, in the straight, about 380 mm. (15 inches), or along the convexity, about 440 mm. The handle consists of two short, longitudinally disposed pieces of wood.§ The encircling bands, to which the handle is lashed,

* Journ. Anth. Inst., vi., 1877. pl. i., fig. 9.

† Vol. ii., p. 251.

‡ "Wanderings in a Wild Country" (1883), p. 17.

§ Cf. Finsch, 1888, pl. xxiv., fig. 3*a*.

divide the front of the shield into a central transverse area and two large terminal areas. The former is usually whitened, rarely coloured red or black, or decorated with a pattern (Berlin, 1030; Milne Bay: this shield also differs in the handle, which is loop-shaped, and cut out of the solid wood). Strengthening cross-bands of cane usually occur at the ends of the central area, and the four triangles thus caused are painted red. The ornamentation of the rest of the shield has some pretence to symmetry; but variations on the same shield often occur. The patterns are carved in low, flat relief, and the colours employed are black, white, and a deep purplish-red. The decoration is usually confined to a narrow or wide border, broadest at the apex, and tapering away laterally, thus leaving a central elliptical blank area, which is painted black, and is traversed by the transverse band already described. Occasionally there may be a little carving on this area (*e.g.* a Bentley Bay shield in the Berlin Museum and two shields in the Cambridge Museum), and white spots may be painted on the black ground. The ornamentation of the raised, white, marginal crescent consists of one,* two, three, or more concentric circles, situated in a counter-sunk red space. Judging from several specimens I have seen, it appears probable that the original design was a face, of which the eyes alone now persist, and these to a constantly decreasing extent.† Other ornamental designs are sometimes introduced.

These shields come from Milne Bay, Bentley Bay, and East Cape.

4. MATS.

Mats of double thickness, made of strips of pandanus-leaf sewn together, may be found in collections as coming from China Straits or contiguous localities. An interesting point about these mats is, that patterns are scored upon the leaves when green. The scratched sides are placed facing one another when the mat is made, as the marking shows through on the other side of the leaves the mats look something like drab-coloured watered silk. The Rev. Dr. Wyatt Gill (1885, p. 329)

* *Cf.* "Album," pl. 282, No. 3.

† *Cf.* Finsch, *l. c.*

appears to be the only author who has described these mats. He says:—

“A curious matting is prepared at South Cape from the leaves of a species of pandanus, sewn together in squares of four feet with *sei*, a fibre of great strength. A wavy pattern is tastefully scratched upon it whilst green. This stuff is used as matting to sit or recline on, and when pretty well worn is converted into a girdle for the men. The women never use it, they wear the universal grass petticoat.”

An important result from the substance of which the mats are made, and the method of their decoration, is that the design is scarcely conditioned by these two factors. The effect of plaiting on decorative art is well known, and everywhere mats illustrate this conditioning effect; but here the smooth surface permits the artist to transfer to the mat whatever designs may be preferred. As one might expect, the bird-scroll appears to be the basis of the patterns. I have been unable to work out these patterns as fully as they deserve; for, judging from the material before me, the scroll pattern undergoes specializations and degenerations, which do not occur, or but to a very slight extent, on other objects. One or two of these derivatives are indicated by Partington.*

IV. The Mainland and Moresby Group.

The first of our sub-divisions of the Massim District is the largest and most complex, as it includes the coast-line of the extreme south-east point of New Guinea, together with the neighbouring islands (excepting the D'Entrecasteux Group), as far south as Wari (Teste Island), which, as we shall see, is a great meeting place for the whole district. I would like once more to point out that the subdivisions I have adopted are quite arbitrary, and are employed solely for convenience.

The mainland and the islands are characterized by being very hilly and fertile.

* “Album,” pl. 280, No. 4, which is a sketch of a mat in the British Museum (89. 12-5. 32).

In the following account I shall commence with the natives of the mainland, and then pass to the islanders.

The mainland portion may be taken to commence at Pouro (Mullen's Harbour), and to extend right across the peninsula, say to Baunia (Bartle Bay). The southern coast of this peninsula is remarkably provided with good harbours, its extremity is emarginated by the deep, wide gulf of Tauwara (Milne Gulf or Milne Bay).

The more important islands are—Mugula (Dufaure I.), off Pouro; Suau (South Cape); Tassai (Brumer I.); Rogea (Heath I.); Samarai (Dinner I.); Sariba (Hayter I.); Sideia (Basilisk I.); Basilaki (Moresby I.); Tubutubu (Engineer Group). The last six islands and their immediate neighbours may conveniently be termed the Moresby Group.

Wari (Teste I.) is an outlier of this district.

China Strait is the passage between Rogea and Sariba (in which Samarai lies), and between the latter and the mainland.

Lyne describes (pp. 147–156) the visit of Commodore J. E. Erskine, on board H.M.S. "Nelson," to Pouro (Mullen's Harbour), lat. $10^{\circ} 30'$, long. 150° . Many of the men "had painted broad black lines across their foreheads and faces. . . . The women wore their hair twisted into very small ringlets, and they were tattooed very elaborately in lines across the face and about the body" (p. 150). He also gives (pp. 166–175) a short account of the Suau (South Cape) natives, and of a cannibal feast at Rabi, Milne Bay (pp. 200, 201). Although it may not strictly belong to this district, I may mention that at Mailu (Toulon Island), about thirty miles west of Pouro, Lyne noticed that "tattooing appeared to be practised very extensively among the women" (p. 143). A short account of Toulon Island will be found on pp. 137–146, and Chalmers (1885), pp. 73–76. The language of Mugula closely resembles that of Sariba.*

Chalmers (1885, p. 48) says: "The S. Cape people are small and puny, and much darker than the Eastern Polynesians." . . . "We see quite a number of strangers every day—some from Brumer Island, Tissot, Teste, China Straits, Catamaran Bay, Farm Bay, and other places. Those

* Cf. Mac Gregor, C. A., 1, 1892, pp. 28–30; and Macgillivray, I., p. 286.

from Vakavaka, a place over by China Straits, are lighter and better-looking than those here. The women there do not seem to tattoo themselves. Here they tattoo themselves all over their faces and bodies. I have not seen one large man or woman amongst them all" (p. 51). "These Suau cannibals are adepts in carving, as is evidenced by elaborately carved wooden birds placed at the entrance to the church, their paddles, chunam spoons, with a god at the handle-end, and weapons of war, all of ebony" (Gill, 1885, p. 329). On p. 334, Gill refers to "two axes solemnly carried by the chiefs as a preliminary to peace; . . . a glance at the slight artistic hafting will convince anyone that they are not intended for cleaving timber."

Sir Peter Scratchley says, concerning the Discovery Bay natives: "The women here do not tattoo, and are better looking. All the population was very friendly (Nov. 19, 1885). The catamarans consist of three long pieces of trees, lashed together with some fibre. The natives are very dextrous with them, paddling either sitting or standing" (p. 357). Moresby, who first discovered this Bay, says (p. 216): "The natives of Discovery Bay were friendly from the first. They were similar in appearance to those we had as yet met on this coast." Moresby describes Discovery Bay in Tauwara Gulf (Milne Bay) (pp. 214–219), and Karo-Wau, the Killerton Group, on pp. 220–222. At East Cape (pp. 224–229): "The young women were agreeable enough looking, and had beautifully small hands and feet." "Tattooing is not the fashion in Milne Bay, and the women so adorned were guests from Dinner Island" [Samarai] (Finsch, p. 267). Finsch gives a general account of Tauwara Bay and the neighbouring islands (pp. 262–273).

Bevan (1890, p. 89) says: "These Milne Bay people are a distinctly fine race; the men well-built and muscular, and the women, the younger especially, often possessing not only attractive features, but smooth skin and comely forms. Many of their implements display the possession of no small degree of patience and ingenuity, and some even a sense of art. Take, for instance, the *enalle*, or chunam knives, which often possess skillfully-carved handles in various designs of animal life. . . . Then, again, they make and use, for various domestic purposes, bone needles and

[28*]

thread. . . . The men wear their hair in long matted ringlets over their shoulders, and threaded thereon the vertebræ of those they have slain. . . . Unlike the tribes of the Papuan Gulf, the natives of the East End of New Guinea build their canoes with outriggers, and sit down (instead of stand up) to paddle." . . . At the head of Milne Gulf, he goes on to say, "the most noticeable feature in the great boat houses, larger than the domiciles, in which the sacred war canoes, hewn out of single gigantic cedar logs, are religiously tended"—these canoes may be sixty feet long and hold forty men.

Speaking of the Lariva, who inhabit the high ground at the back of Pouro (Mullen's Harbour), and behind the Dahuni, Chalmers says (1889, p. 140): "The people are of the same tribe as those on the coast; they wear the same things, speak a dialect of the same language, build the same kind of houses, and bury their dead in the same manner."

"The women of Opepago" (on the mountains at the back of Discovery Bay, Milne Gulf), "as is the case with all on that side of the mountains, are much finer-looking than on the other side (Lariva tribe); they are more buxom, clearer-skinned, and do not tattoo themselves. The men are much the same as on the other side. The dialect is quite different, but there is a *patois* which both parties understand" (Chalmers, 1889, p. 143).

The peninsula north of Tauwara (Milne Gulf) is a fertile mountain range, the peaks reaching up to 3000 or 4000 feet; they are rugged and covered with thick forest, especially on the south side. The inhabitants of this area are of the characteristic Papuan type. "Only two different languages are in use among them. The houses are all on posts. . . . Cooking is done generally in wide-mouthed clay pots, resting on a tripod of stones, but is sometimes performed by means of heated stones. . . . A small number of men are tattooed by a few lines on the back, but tattooing is not common among them. . . . They have entirely ceased to use the stone axe in this part of the country. . . . The population is divided politically into districts, but form independent federated communities, *ahiomā*. Each district contains probably about 80 or 100 spearmen, and a population of about 1000. There is no high chief in any of these

communities, nor does any one village, as a rule, acknowledge the undisputed sway of any one man" (p. 277).*

On the north side of this peninsula the small Ancell Peninsula separates Awaiaama (Chads Bay) from Bentley Bay, beyond the latter is East Cape. The story of the murder of Ancell in Awaiaama and the retribution meted out to the murderers is told by Baden-Powell.†

Finsch says (p. 234): "The natives of Bentley Bay, as at East Cape, are of a tolerably light skin-colour, and belong to those who, by the ignorant, are pronounced as of Malay mixture," and he again refers to "true Papuans" having the hair straight or in ringlets. Close by Chads Bay Finsch came across an albino, whom he describes on p. 240. "At all events," he continues, "it is very remarkable that of dark parents quite light children may sometimes be born, whilst for the converse a single case is hardly known. I knew a Papuan family at the South-east of New Guinea, of which the parents were very dark, two of the children were dark and two light, as white as Europeans."

An interesting account of the Tassai natives is given by Macgillivray, I., pp. 253–284.

The islands of Rogea and Sariba, and the charnel-houses in their villages, are described by MacGregor (C.—5883, 1890, pp. 305, 306): "They are practically one people, using the same language." The Rogea canoes are procured from Maivara and Wagawaga in Tauwara Bay.

A good description of Samarai (Dinner Island) is given by Baden-Powell (pp. 137–147). Of this small island, Finsch writes (p. 277): "What most surprised me was to find tattooing here; this I had not observed in all our previous travels, and it is wanting in the neighbourhood of the D'Entrecasteaux and in Milne Bay. It again brings out that many customs and practices are extraordinarily locally distributed. The tattooing of the women and girls is a very peculiar and rich form of body ornamentation; it clothes, sometimes in a Greek pattern, the face, arms, and

* Mac Gregor, C., 5883–1890, pp. 275–277, 297–301; C. A., 1–1892, pp. 10, 63; also Thomson, p. 34.

† "In Savage Isles and Settled Lands," 1892, pp. 147–186.

front and back of the body." On p. 278, he gives a woodcut of a tattooed woman from Rogea (Heath Island).

Finsch (p. 267) describes Aroani in the Killerton Group, and gives a plate, illustrating the tattooing on the women, and the large human effigy over the church door.

"The Tubutubu (Engineer Group) people are great traders. I saw there four fine sea-going canoes, of from forty-five to fifty feet in length and of about six-feet beam, which they had purchased from the natives of Murua. The island has probably not less than 300 inhabitants on it." (Mac Gregor, C.—5883, 1890, p. 302).

Captain Moresby describes as "copper-coloured" the natives of Wari (Teste Island) (p. 182), Basilakai (Moresby I.) (p. 188), Sariba (Hayter I.) (p. 202), and East Cape, "the pleasantest savages" (p. 226). But on Lydia Island "the natives seemed of a darker race than those in the vicinity; the houses were unusually small" (p. 245).

M. Cauvin* says: "In the series [of 16 skulls] from the Engineer Group, we can form two groups, especially if we pay regard to the character of the face." Hamy (pp. 511, 512) quotes Cauvin's results, and adds: "M. Cauvin concludes by comparing his observations with those of Mr. Comrie. He finds between the two series of facts 'a sufficiently close agreement.'"

Dr. Comrie† gives an account of this District, and measurements of fifteen skulls. He alludes (p. 106) to the variations in the colour of the skin, but "the features and hair, even in the lighter individuals, remain unaltered."

Bevan writes (p. 87): "These Moresby Islanders (like the natives of the east end generally) are a small, active, copper-coloured race."

At Wari (Teste Island) Finsch saw "a couple of gable-ends of houses with some varied coloured carved work, but there was no representation of the human figure (pp. 279, 280). Finsch describes and gives illustrations of the manner in which the women of Wari make pottery (pp. 280, 281, and Atlas, pl. iv., figs. 6–10). The upper border of these pots

* "Mémoire sur les races de l'Océanie," Arch. des Miss. Scientif. (3^e sér) viii., p. 452.

† "Anthropological Notes on New Guinea," Journ. Anthropol. Inst., vi., 1876, pp. 102–113.

“exhibits various simple band patterns, which are scratched with fork-like bamboo instruments, and which serve not for ornament but as trade-marks. Thus here also each woman has her own mark, with which she signs her fabrication. The pottery has an extended sale as far as the D’Entrecasteaux, and to Chads Bay, South Cape (Suau), Woodlark Island (Murua or Mulua); perhaps also to the Louisiades. The small Chas [as Finsch calls Teste Island] is by this means a centre of barter for all this district, where pottery is unknown. Scarcely provided with serviceable wood for house-building, such must the islanders barter from elsewhere for a great number of manufactured articles and weapons, also some of their provisions.” He goes on to say that this condition of things is now changing, owing to the advent of the white man. . . . “As at Port Moresby whole fleets sail to the Papuan Gulf to exchange pottery for sago, so also the Murua natives (the Woodlarks are 150 miles away) come to Teste Island to buy these important cooking vessels. I observed, moreover, that the canoes acquired by trade at Teste were only partly finished, and there received their ornamentation and carving. The latter are in very involved, deeply-cut patterns, and smeared with red and black colour, for which is used a curious implement* made from the *Pinna nigra*. It may be remarked that at Teste catamarans are still occasionally employed, as at Bentley Bay” (p. 282). Tattooing is very common among the women, in patterns which closely agree with those common to Rogea and Sariba (p. 284). Finsch gives figures of a tattooed young girl from Wari (p. 283), and of a man with devices painted on his face (p. 284).

Dr. H. O. Forbes has kindly permitted me to make the following extract from his unpublished Journal:—

“*Jany. 1st, 1887.*—Making clay pots is one of the industries of the place in Teste Island, owing to the presence of a good tenaceous clay. A substantial foundation of a thick, flat, slightly concaved, layer of clay is laid on the ground; then ring upon ring, from the interior centre of this foundation, is laid round, flattened out and amalgamated with its predecessor by pinching between the finger and thumb. These rings are first rolled out between the palms. Each ring, as it is added, is smoothed with the two forefingers inside and out. When the required height is attained, a rim, or mouth-piece, is added of thicker rings of clay. The whole

* Cf. “Atlas,” pl. vi., fig. 5.

interior and exterior is then trimmed with the edge of half a bivalve-shell, and smoothed with the wet palm of the hand. There remains now only the ornamentation, and this is put on with great ease of hand by means of the simplest of implements—a set of small two- or three-pronged combs or forks. The decoration consists of waved lines in various directions, which, when completed, give a very finished look to the ware. The sole implements of the Teste Island pot-artificer are—a broken conch (to hold water), the half of a bivalve-shell, two or three chips of bamboo, and several two- or three-pronged forks, and the bare hand. Though she has no wheel, her pots are shapely, and as she nimbly added her 'trade-mark,' she looked as if she were in no wise ashamed of the product of her hands. Only the larger pots have the double bottom spoken of. The smaller have only a single layer of clay rings. In the evening the shore is often quite brightly lit up with the glowing open wood fires in which the pots are being burned. The natives have no knowledge of a glaze. Their wares are exported to neighbouring islands in exchange for sago, yams, and other foods."

I have also copied Dr. Forbes' sketches (fig. 81). The upper and lower bands were made by three-pronged forks; the lowermost marking was made with the flat end of the fork, and the middle designs with two-pronged forks.



FIG. 81.

Clay pot, with an incised pattern from Wari, after a sketch by Dr. H. O. Forbes.

I have very little to say about the artistic characteristics of this division. I think we may safely regard it as the head-quarters of the bird and crocodile design, the typical bird-scrolls occur everywhere throughout the district. The clubs belonging to types I. and

II., and the oval and oblong shields also characterise it; there is one of the former (type I.) in the British Museum (9834), from Possession Bay, Sariba, with a guilloche, or unravelled bird-scroll, pattern very similar to fig. 60.

V. The Louisiade Group.

The Louisiade Archipelago consists of an intricate assemblage of islands, islets and reefs, which extend from about 152° to 154° 25' E. long., and lie between the 10th and 12th parallels S. Roua (Rossel), Tagula (Sudest), Panna Tinani (Joannet), and Misima (St. Aignan), are the only islands of any size. They are composed of old igneous rocks which form high and often steep hills; the vegetation is luxuriant. Tagula

is about 155 miles E. by S., from the nearest point of the mainland of New Guinea. Roua lies to the extreme east, and Misima north-west of the group.

The Louisiades were visited by the "Rattlesnake" in 1850. Macgillivray (i., pp. 168–250) gives an account of the previous explorations of the group, and adds much interesting information.

Panniet or Pannaet (Deboyne Island) has an area of about ten square miles, with a population of about 2000. "In dress, manners, and language they resemble the tribes of Misima, but they seem to be more active, more intelligent, and of better physique. . . . They have plenty of food. . . . They are great traders, and Pannaet is the great canoe mart of this part of the country. . . . They build here the best canoes constructed in the Possession. They use adzes of hoop-iron in this work, and they sell the canoes when made at from ten to fifty stone axes. They do not use the stone axe as a tool in this part of the country, but it still represents the standard of currency in great transactions" (Mac Gregor, C. A. 1, 1892, p. 66).

W. T. Campbell (*l. c.*, p. 84) describes the people as containing "the best natives, industrious, intelligent, and not devoid of courage—a doubly-pleasing virtue in the Louisiades, where treachery and cowardice are predominating traits."

Mr. Ray informs me that the Pannieti language is practically the same as Misima; the grammar is unquestionably Melanesian, but a great deal of the vocabulary is strange.

Utian (Brooker Island) and Pana-Udiudi lie close together, and are situated twenty miles south of Pannaet. The people are closely related, and have the same aggressive tendencies. In these two islands wide-mouthed clay-pots are made, but not canoes (*l. c.*, p. 67). "The Brooker Islanders I found to be the most unsettled and untrustworthy" (Campbell, *l. c.*, p. 84). Romilly (1886, p. 138) says: "The stone implements made here are very fine. I got some axes of enormous size, which I am sure could not have been intended for use. They seemed rather to be a common possession; perhaps two or three belonged to the village, and were exhibited on state occasions. . . . The canoes built at Teste and Brooker Islands are very fine."

Misima contains an area of over 100 square miles; it is fertile, forest clad, and mountainous, Mount Lakia being about 3500 feet in height. On the eastern coast there is a high raised coral beach, 1000 to 2000 feet in height. The scenery of the island is very romantic. The population consists of some 3000 souls, occupying thirty villages. Many of these villages were apparently in a state of social warfare; the men are head-hunters, and decorate the front verandahs of their houses with the skulls, and sometimes right arms, of their victims.

“The population is evidently active and industrious. They make extensive gardens in the forest, which they prepare at great labour, owing to the rocky, precipitous nature of the ground. A large number of people plant together. They have no fishery of any kind, having no sea reef. . . . They have a few fowls, and some pigs. . . . The inhabitants manifested a very strong disposition to trade, but they have hardly anything that they could make an article of commerce. . . . These people are much more markedly Papuan than the natives of Sudest and Rossel. They are extremely vivacious, but inclined to be suspicious. . . . They have entered the iron age, and appear to have entirely given up the use of the stone axe except as a medium for purchasing wives. Their cooking-pots they obtain chiefly from Brooker Island, where they buy them for sago, but they make a few themselves. Their clothing consists of pandanus leaf solely. They are a healthy race. . . . The language bears but little resemblance to those of the neighbouring islands. It is replete with words terminating in consonants, chiefly with ‘an’ and ‘ak’” (Mac Gregor, C. 5883—1890, pp. 249—251). The houses are much the same as those of Sudest and Rossel, but they are entered at the ends instead of through a trap-door.

Mac Gregor confirms (C. A. 1—1893, p. 32) his previously expressed opinion that these natives “are of the lowest type, and to be the least trustworthy with which we have to deal.” *Cf.* also C. A. 1—1892, p. 69, and Thomson, p. 28.

Basil Thomson says: “The natives were of two types, the one evidently Papuan, and the other betraying strong Malay characteristics, such as the straight hair, and not prominent features.” They were a great contrast to those he had hitherto seen [the Tagula and Roua islanders] in

their boisterous and demonstrative friendliness, their vivacity, and their intense eagerness to trade. He gives a few other details, p. 533.

Tagula (Sudest) is about fifty miles long, and fifteen at its greatest breadth. "The periodic raids of the wild cannibal head-hunters of Brooker Island [Utian] fame have wrought sad havoc amongst this ill-fated island tribe, who for years have led a life of terror" (J. P. Thomson, p. 15).

Macgillivray (i., p. 189) describes the natives of Nimoa (Pig Island), in Coral Haven, in the following terms: "The men were dark copper-coloured, with the exception of the spokesman, whose skin was of a light-brownish, yellow hue. The hair in nearly all was frizzled out into a mop, in some instances of prodigious size; . . . the physiognomy varied much; some had a savage, even ferocious aspect." He then goes on to contrast them with Australians, and in a footnote alludes to the fact that some have the forehead narrow and receding, appearing as if artificially flattened, thereby giving a prominence and width to the hinder part of the skull." The lighter coloured man just referred to spoke with Malay intonation. For his accounts of Tagula, etc., cf. pp. 186-217.

The islet of Dadda Hai (Brierly I.) and its natives are described by Macgillivray, i., pp. 218-241.

There appear to be but few inhabitants of Panna Timani (Joannet Island). These live a nomadic life, and "in type the few natives are inferior to those of the neighbouring islands, of irregular features, ill-fed, and miserable in appearance" (Mac Gregor, C. 5883, 1890, p. 251). Cf. B. Thomson, 1889, p. 532.

Roua (Rossel) is an extremely fertile and mountainous island, about twenty-two miles in length, and ten and a-half broad. Its highest peak is some 3000 feet in height. It is of no value for agricultural or pastoral purposes, being so rugged. The population is about 1200.

In 1859 a French steamer, "Styx," was sent to Rossel to investigate the fate of the "St. Paul," which was wrecked at Rossel on September 30, 1858, with 327 Chinese emigrants on board. Of these all but one had been massacred and eaten by the natives in about two months. M. V.

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de Rochas* describes the islanders as having "the skin of a dull black, like soot, the nose flat, the mouth large, the eye black and blood-shot, the cheek-bones prominent, the hair black, long, and frizzly, the beard sparse and frizzly curly, the brow slightly retreating." Their height and musculature are mediocre, the women are obese, and both sexes chew the betel.

The island is alluded to by Macgillivray, *i.*, p. 182. Winter (CA. 105—1890, p. 157) thinks the native name of the island is Duba.

Mac Gregor (C. 5883—1890, p. 245) says: "In type the natives of Rossel Island differ from those of the mainland, resembling in appearance a mixture of the Motu native and of the New Hebrides native. They are not so delicate-looking as the Motuan. The houses are perfectly clean. Cooking is done by means of small heated stones; they have no pottery. The stone adze seems to have fallen completely into desuetude amongst them" [1888]. They mount introduced pieces of iron as the stone adze is mounted in other islands. In a later despatch (C. 6323, 1891, p. 197) he says: "The Roua natives are perhaps the most harmless and inoffensive in the Possession. . . . They are not tattooed. The women are very clever at basket making. Each man carries a basket on his arm, in which he has the ingredients for betel-nut chewing, and almost invariably a piece of fine sponge for washing his face." This is unique in British New Guinea (p. 198). Mac Gregor noticed here the large incrustations on the incisor teeth, due to the practice of betel chewing.†

"The natives of Rossel," according to B. H. Thomson (1889, p. 532), "bear little resemblance to the pure-bred Papuan. Their appearance suggests a hybrid between the Papuan and the natives of the Solomon Islands, the nearest of which is only 250 miles distant, and situated to windward of Rossel. They are a short but robust race of that sooty brown complexion that resembles black. The nostrils are wide, the nose flat, and the face markedly prognathous. They bore the cartilage of the nose, and enlarge enormously the lobe of the ear, but do not tattoo. The

* "Naufrage et scènes d'antropophagie à l'île Rossel dans l'archipel de la Louisiade, Mélanésie," *Tour du Monde*, 1862, 2^e sem. p. 14.

† Cf. "On Macrodonatism," N. de Miklucho-Maclay, *Proc. Linn. Soc. N. S. W.*, iii., 1878, p. 169, pl. 18.

men's dress consists of a single pandanus leaf secured round the waist by a cord of human hair." The houses are like inverted boats on piles five feet high, and are entered by two trap-doors in the floor. Cooking is carried on beneath the house in pots supported on a triangle of stones. The language is peculiar, and is spoken with a curious, half-querulous intonation.

The very few objects in Museums, which are labelled as coming from the Louisiades, usually have certain characters in common, which assists us in identifying other specimens of which the localities are unrecorded.

I cannot take a better typical example than the splendid turtle-shell lime-spatula in the British Museum (51. 1-3. 160), which was obtained by H.M.S. "Rattlesnake" in 1849 (fig. 68). The arcuate termination of the spatula, borne upon two birds' heads, appears to be a common feature of this district, as is also the row of perforations. In this particular object the ends of the crescentic enlargement terminate in birds' heads, to which are added two birds' heads with interlocked necks. The peculiar design along the lesser curvature of the crescent has probably been suggested by the interlocking of the beaks of the birds.

Another spatula (51. 1-3. 106), obtained on the same occasion, illustrates a variation which has several interesting features, the most noteworthy being the inferior curve which is produced by connecting the fronts of two birds' heads.

There is a very elegant spatula in the British Museum from the Louisiades, of which the handle is carved into a shape resembling that of a canoe; the sides are ornamented with the scroll pattern.*

One or two lime-spatulas are of especial interest. In the Cambridge University Museum the carved handle of a spatula, from an unrecorded locality, represents two birds' heads in succession, an eye being inserted within the curved ends of their beaks. In the Berlin Museum (vi. 4290) there is a somewhat similar spatula, also with no locality. In this the bird's head is unmistakeably developed into the scroll pattern. I happen

* Cf. "Album," pl. 281, No. 6.

to possess a spatula very closely resembling the latter, and which is labelled from the Louisiades. I have, therefore, little hesitation in ascribing the two former spatulas to the same district.

In the Oxford Museum there is a paddle which terminates in a bird's head, and there are some canoe ornaments in the British Museum with involved bird and scroll decoration.

The foregoing objects include nearly all those known to me, which are stated to come from the Louisiades. The feature common to all these objects is the employment of birds' heads, and these are often combined in very ingenious ways, especially by the interlocking of their hooked beaks, or even of their necks.

It is a noteworthy fact that no instance is known to me from the Louisiades of any representation of animals other than these birds' heads—the crocodile and mantis do not occur—the only exception is in the head at the end of the handle of some of the spatulas, and there is a human face on a small canoe ornament from Brumer Island in the British Museum (51. 1–3. 124).

VI. The D'Entrecasteaux Group.

The D'Entrecasteaux group consists of three large and numerous small islands, which extend from lat. $9^{\circ} 15' S.$; long. $150^{\circ} 5' E.$ to lat. $10^{\circ} 11' S.$; long. $151^{\circ} 17' E.$ There are very distinct evidences of volcanic activity in these islands.

Duau (Normanby I.), the most southerly of the group, like the other islands, consists of a high rugged mountain range. It is about forty-five miles long, and twelve or so broad. According to Mac Gregor it "is unfit for European cultivation, and its planting lands seem to be required for its own settled population. They are a healthy, active people. . . . Much time and labour is evidently devoted to their plantations. . . . They are very fond of ornamental plants about their houses. . . . The houses have saddle-shaped roofs, with high-peaked ends, and stand on posts about six feet high." The population is over 5000. "The Papuan type is well seen in these people. Most of the men have great mop heads of black

frizzly hair, but there are a few individuals with wavy hair, and these generally have coarse, irregular features. . . . The men are not tattooed, but frequently smear black lines on the face. . . . Some of the women are tattooed. Cooking is generally done in clay pots of the Brooker Island pattern, which the natives say they buy for yams. . . . There can be no doubt that the most advanced of them, those of the east end, are head hunters; and that chronic warfare exists between different sections of the island. The inhabitants of the southern part of the island are very ready to trade. . . . Those of the central portion have no idea whatever of trade, and those of the north end have a less productive country, and do not seem to possess the energy of those in the south" (C.—5883, 1890, pp. 252–256; or C.A. 13—1890, p. 11; *cf.* also C.A. 1—1892, p. 63; C.A. 1—1893, p. 23; Basil Thomson, 1889, pp. 534–536).

Basil Thomson informs us that the various tribes on the north coast of Normanby seem to be hostile to one another, and to speak different languages. So complete is their isolation that, in all respects but their physical characteristics, they are different peoples. "At a spot not ten miles from a tribe, that would barter all they possessed for tobacco and pipes, were people so ignorant of their use that they put the tobacco into a bottle we had given them, poured water upon it, and drank off the compound" (p. 536).

Moratau (Fergusson Island) is the largest of the Group, and is about forty miles long by twenty-four broad, and has a population of about 6000. The inhabitants appear to be divided into tribal sections, speaking distinctive dialects. They voyage in large canoes, capable of carrying from twelve to twenty people. They are keen traders. The different tribes possess corresponding temperaments. Head hunting occurs. In some villages the gables of the houses are produced into very high peaks. The houses are raised on piles, and have a verandah at one end. The people at the south end of the island seldom tattoo, but they make cicatricial marks and patterns on the skin (C.A. 1—1892, p. 65; *cf.* also C.A. 1—1893, pp. 2, 3; B. H. Thomson, 1889, pp. 536–539).

Goodenough, the most northerly of the Group, is also thickly populated. Clay pots of native manufacture are used for cooking food. The people

are undemonstrative, friendly, and less suspicious than their neighbours. "Their houses are very long, and taper away from the end nearest the village square. They are practically an inland or 'bush' tribe" (B. H. Thomson, 1889, p. 540).

At Cape Pierson, the N.E. point of Normanby Island, Labillardière,* refers to a man who was as black as a Mozambique negro among his olive-skinned compatriots. Captain Moresby found the D'Entrecasteaux natives very friendly (pp. 245–255); of Cape Ventenat, the most southerly point of Normanby Island, he writes: "Here, for the first time, human figures, painted on the gable-ends of the larger houses, were seen by us; the artist's skill was of the rudest, and the subjects unfit for reproduction. We did not meet with any other attempt to delineate the human form here, save in some small grotesque carvings at the ends of wooden knives, spoons, and ornamented clubs, of which many were pretty well executed" (p. 246).

All the natives of the D'Entrecasteaux Group appear to be head-hunters. Owing to the steepness of the coast there are no fringing reefs, and as the sea is deep very little fishing is done. As a consequence the people are driven to agriculture, at which they are very expert, and make gardens on the level ground, and terraces on the mountain sides. In Normanby the soil, which is very rich, is prevented from being washed away by felled tree-trunks, and by stone walls in Goodenough.

Finsch says (1888, p. 216): "The wooden floats of the beautiful fishing-nets were sometimes carved; . . . of weapons I saw only spears and short wooden hand-clubs; they also have the sling. The bow and arrow and shield are unknown."

"They are a healthy people; they suffer much from ring-worm, but they have neither leprosy, elephantiasis, itch, nor ophthalmia. . . . Their arms consists of spears, clubs, slings, and adzes." The houses of Duau and Moratau are similar, but those of Goodenough Island are quite different in shape (Mac Gregor, C. 5883—1890, pp. 253, 257, 262).

* *Relation du voyage à la recherche de La Pérouse fait par ordre de l'Assemblée nationale*, Paris, an viii. [1800], t. II., p. 275.

I feel some hesitation in speaking dogmatically about the decorative art of this Group, owing to the influence which the art of the Trobriands and neighbouring islands has undoubtedly exercised upon it; and here, as elsewhere in this District, we have a mingling of locally manufactured and imported objects; and what I take to be the former bear traces of diverse influences. For example, there are clubs in various museums labelled as coming from the D'Entrecasteaux, which have the form which, I think, we must regard as more particularly belonging to the Woodlarks and Trobriands; but instead of the serial bird's head-and-neck pattern, and its derivatives, which characterise these clubs, we have the typical bird-scroll of the other Groups, and the design occupies nearly the whole of the blade instead of an upper transverse band (*cf.* "Album," pl. 295, No. 3).

The only original illustrations in this Memoir of D'Entrecasteaux patterns are figs. 59, 62, 72, 77–80, 82, 83; but I should not be surprised if the designs in figs. 55, 58, 60, 61, 65, 66, 67 and 71 came from this Group. The spatula shown in fig. 70 is stated to come from the Louisiades, but I do not think it was made there; it appears to me to be more characteristic of the D'Entrecasteaux. An interlocking bird's head and neck pattern, similar to the lateral patterns on fig. 71, encircles a spatula from the D'Entrecasteaux in the Dublin Museum (975, 1884).

The handsomely carved pestle and mortar for betel crushing, in the British Museum (+1701),* and the coconut vessel,† give one a favourable impression of the artistic sense and technical skill of the D'Entrecasteaux folk.

A general survey of these and other designs gives one the impression that the art of this group is characterised by a tendency towards a simplification and even disintegration or breaking-up of the typical bird-scroll pattern. A good example of this is seen in the spatula from Duau, figured by Finsch in the "Ethnol. Atlas," pl. v., figs. 2, 3, and in a carving from Moratau (Finsch, 1888, pl. xxi., fig. 2). Figs. 59, 62, and 80 also illustrate this peculiarity.

* *Cf.* "Album," pl. 279, Nos. 2, 3.

† *Loc. cit.*, pl. 313, No. 7.

Another example occurs on the rim of a large wooden bowl, in the possession of Mr. A. Goldie (fig. 82). This bowl was obtained at the



FIG. 82.

Rubbing of part of the carved rim of a wooden bowl from the D'Entrecasteaux. In the collection of Mr. A. Goldie. One-third natural size.

D'Entrecasteaux, but it is precisely similar to others from the Trobriands, &c. The inner (or upper) pattern is evidently a very degenerate bird-scroll.

There also seems to be a partiality for employing isolated designs, as in fig. 83; the chevrons also occur in fig. 62. A handsome club of type III. occurs in the Dublin Museum (980. 1884). It has on one side a pattern resembling that of fig. 53; but the other side has two groups of eye-marks, containing 90 and 81 respectively. Besides other isolated designs, there are a number of designs closely resembling the lowest left-hand emblem in fig. 73, and allied also to those in figs. 77-79. Lastly, there is a considerable variation in the manner in which animal forms are employed in decoration.



FIG. 83.

VII. The Trobriand and Woodlark Groups.

Until we have more precise information, these Groups must be classed together as a sub-district of the Massims. The Laughlan Islanders are certainly related to those of the Woodlarks.

THE TROBRIAND GROUP.

The Trobriands are a group of islands which lie in lat. $8^{\circ} 23'$ – $8^{\circ} 55'$ S., and long. $150^{\circ} 45'$ – $151^{\circ} 25'$ E. Mac Gregor says:—"The principal island is called Kiriwina, and the natives at a distance generally speak of the group by that name. It will therefore in future be employed to denote the group and the chief island" (C. A. 1, 1893, p. 3). As it appears to me to be convenient to retain the old name for the Group, I shall employ it

for the present, especially as the natives have no distinct name for the archipelago.

Kiriwina is a narrow, irregularly-shaped island, nineteen miles in length; the meridian of 151° cuts it twice, and the latitude of $8^{\circ} 30'$ traverses its northern end. There are numerous small islands to the west, chief of which is Kaileuna. Immediately to the south, and almost joining it, is the small island of Vakuto, and to the south of this is the larger Lagrandière Island (? Avatana). Eleven miles to the east of Kiriwina is the small island of Kitava or Nowau (Jurien I.).

The small islands of Garva and Kwewato are of raised coral formation, and are thickly wooded. Jouvency Island seems to be a series of irregular coral terraces and precipices, thickly wooded. It presents steep cliffs to the sea, which the natives ascend and descend by means of ladders.

"Only one language is spoken in the whole of the Kiriwina Group, and the different tribes are all one people. . . . It was quite plain that social matters are in Kiriwina on a footing quite different from that of any other part of British New Guinea. It was very seldom that a woman or a boy approached a chief except in a crouching attitude; and the chief, called in their language *guiào*, is listened to and treated with respect. They use the bamboo pipe. . . . This tribe is very keen on trading" (Mac Gregor, C. A. 1—1893, pp. 3–7). They are a very hospitable people, and presented Mac Gregor with quantities of cooked food in large wooden dishes. Nothing like this occurs on the mainland.

"It seems that the Vakuta people possess the best sailing canoes in the Group; they appeared to me to be of coarser features generally than the Kiriwina people, with round, wide nostrils and a thick nose; and there are not a few genuinely red-haired people, none of whom were noticed on Kiriwina. This admixture is probably to be traced to the more maritime habits of the Vakuta people. . . . They cook in pots of clay, which they obtain by trading from Murua, Kitava, and elsewhere. On the whole, the women have less influence, and have much less to say than is the case in many of the ruder tribes on the mainland of New Guinea. This is apparently a consequence of the superior position of the chief in the Kiriwina social system. The men are skilful in the manufacture of fine

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wooden dishes and bowls in ebony and other hard wood, and their shields and spears are tastefully made. They do not appear to know either the sling, of such constant use in the neighbouring Goodenough Island, or the bow and arrow."

Mac Gregor also describes the houses, food, clothing, mourning-costume, &c., of these people. A chief and his seventeen wives are described in C. A. 1—1893, p. 28. The men tattoo, but only slightly, and in a rude way; but they delight in ornamenting the bodies by small marks made by burning.*

Mac Gregor describes his visit to the large village of Kadowago, in the island of Avalana, in the following terms: "Before the anchor was down the steamer was surrounded by a crowd of canoes, the occupants of which wished to sell yams. It appears that German traders come to the Trobriands to purchase yams for Matupi. [Matupi is a German Station on the north-east coast of New Britain (Neu Pommern), nearly 300 miles away.] The Rev. George Brown soon found that their language very closely approaches that spoken at Matupi. In fact, we were almost able to hold a sort of broken conversation by means of the languages of Fiji, Murua [Woodlark Island], and Matupi. The island of Avatana is exactly like all the other islands of the Group, of coral formation, densely wooded, and at places presents cliffs of coral rock 100 feet high or more. The fertility of the soil was evident from the immense stores of excellent yams stacked up in specially constructed log-houses" (C. A. 1—1892, p. 7).

The island of Kitava, or Nowau (Jurien I.), 13 miles east of Kiriwina, is a raised atoll. "Many of those people show considerable skill in carving lime spoons, clubs, mortars for crushing betel-nuts, &c. Carving wood and trading are their two favourite occupations." Further details of these people are given on p. 29, C. A. 1—1893. Mac Gregor's first visit to this island is described in C. A. 1—1892, p. 7, or C. 6323. 1891, p. 203.

Between Kiriwina and Murua are the islands of Dugumenu, Kwaiawata, and Gawa, the two latter are elevated atolls. "The men, like those of Kitava, are very fond of trading, canoe-sailing, and wood-carving. As

* Cf. Journ. Anth. Inst., xxi., 1892, p. 481.

traders they are strong advocates of peace. The inhabitants of all these islands are, in my opinion, Papuans; but they are physically and intellectually clearly in advance of the tribes of the D'Entrecasteaux Group, or of the north-east coast. This may be owing to their unusually favourable topographical surroundings" (Mac Gregor, C. A. 1—1893, p. 30).

The Trobriand people, who are very friendly, and do not carry arms, are of the Papuan type according to Mac Gregor. Finsch, however, writes*: "In accordance with the predominant straight hair, one must consider them as Oceanians, but there were also individuals with Melanesian woolly-hair. . . . There is no need to speak of the considerable individual variation in physiognomy, as the Oceanic type is dominant. The people were, moreover, not darker than the Gilbert Islanders, but one finds such light Papuans everywhere." C. Salerio says†: "The natives of these islands have entirely the disposition, colour, speech, and yet are more friendly, less savage, perhaps more cunning, and apparently more modest" than the inhabitants of the Louisiades. Though short they are powerful, and their skin colour is from pale yellow to chestnut brown.

Finsch says the Trobriand men wear a broad piece of pandanus leaf as clothing, and for ornaments, necklaces, plaited armlets, and a turtle-shell (tortoiseshell) ring in the septum of the nose.

They carve round, flat wooden dishes with engraved rims, and Mac Gregor refers to very large, wide-mouthed clay-pots, in which they cook food; these are traded from Murua, Kitava, and elsewhere, to Kiriwina. He also refers to the great number of small fishing canoes, and the quantity of fish caught. They use pandanus fibre for net-making. Finsch speaks of the beautiful fish-nets. Fishing appears to be the chief employment of the Trobriand men, especially the capture of the shark; for this they employ large wooden hooks a foot and a-half in length, which the natives very reluctantly parted with. One can see on these hooks the marks of the teeth of the sea-monsters, and the natives act in lively pantomime the whole performance and the death-throes of the shark. To attract sharks they construct wooden hoops, from which are suspended

* "Samoafahrten," p. 206.

† "Ueber die Inseln im Osten von Neu Guinea," Petermann's Mittheil., 1862, p. 343.

a number of coconut shells split in half. Finsch had previously seen these in New Britain.

Finsch also says (1888, p. 207) that "a great many objects (such as the beautiful lime calabashes) are bartered from Mulua or Murua, the



FIG. 84.

FIG. 85.

FIG. 86.

FIG. 87.

Lime spatulas, Trobriands. One-fourth natural size.

Woodlark Islands, the inhabitants of which, with their large, sea-going canoes, undertake extensive trading voyages. . . . At all events, Trobriand is visited from Normanby, Welle, and Woodlark Islands, for the Trobrianders themselves probably do not undertake trading voyages. Indeed, their canoes, without sailing-tackle, are unfitted for long sea-voyages; some of the canoes were decorated at the bow with carvings" (p. 209).

The only weapons are spears, some partly ornamented with carving and short, heavy hand-clubs, some of which are made of ebony. The wooden shields have a peculiar form, and are artistically painted. "By the shields," Finsch goes on to say, "one can see that these friendly islanders do not always live in peace, for in one I counted no fewer than eleven broken spear-points."

"One peculiarity of the Kitawa people," writes Mac Gregor,* "is the use of a sort of small double shield in dancing. It consists of two carved ends, flat on both sides, and about six or eight inches in diameter, joined by a piece about an inch and a-half in diameter, by which it is held and dexterously whirled and brandished by the dancer. . . . It is clear that they and all other natives of the Trobriands have a great aptitude for carving in wood."

I have published a note on "Wood-carving in the Trobriands" in the *Illustrated Archæologist*, vol. i., 1893, p. 107, and owing to the kindness of my friend, Mr. J. Romilly Allen, I am able to reproduce the illustrations. These require but little comment, as the examples I have given of bird-scrolls, &c., will elucidate most of the details of these figures.

The spatulas include, according to the classification previously given, a bracketed clapper (fig. 85). The bracket is in this case very involved, and can scarcely be placed in either of the subdivisions I have proposed; it may be a variety of the last. Two simple panel handles (figs. 84–86) and one bird-complex (fig. 87). Figs. 57, 63, 64, 69, 73–76, also illustrate

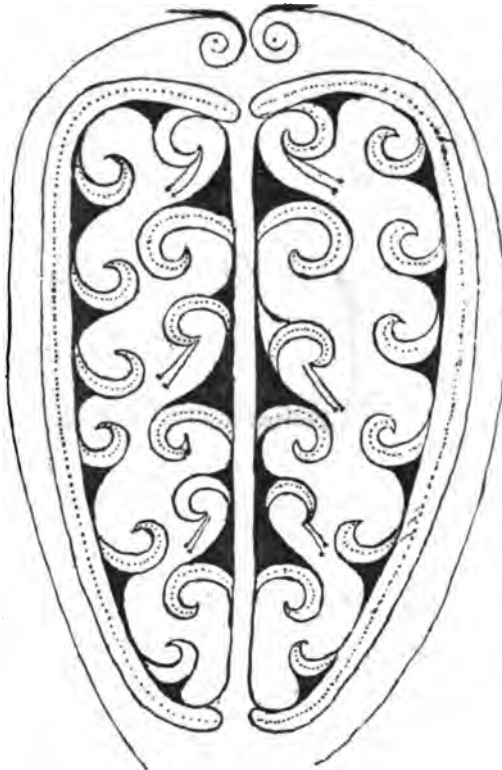


FIG. 88.

Tracing of a design burnt on a lime gourd, Trobriands. Three-fourths natural size. (Cf. Ratzel, "Völkerkunde," II., fig. on p. 258.)

* C.—6323, 1891, p. 203.

the decoration of spatulas, which evidently belong to the same artistic region as the former; they may have come from the Woodlarks. Characteristic, too, of these groups are those with elongated four-ridged handles, or with handles carved as human figures.

The lime-gourds have a nearly spheroidal shape, with burnt designs, in which very fine and dotted lines are employed. The plug is bound round with fine plaited work.* Fig. 88 is from a tracing of the same gourd as the last.

Figs. 89, 90 illustrate the character of the Trobriand drum, and fig. 91

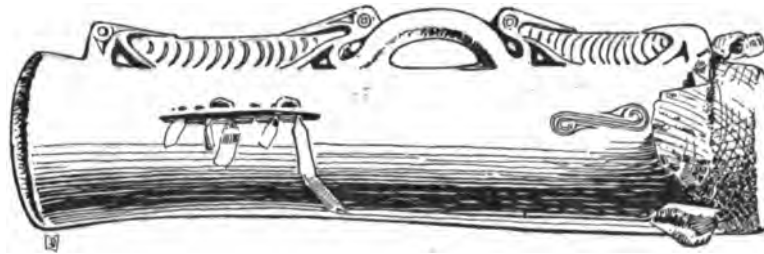


FIG. 89.—Drum, Trobriands. One-third natural size.

that of the double dancing-shield,† *kai diba*, described by MacGregor. Figs. 84–87, 89–91, are from sketches by Mr. C. Pretorius.

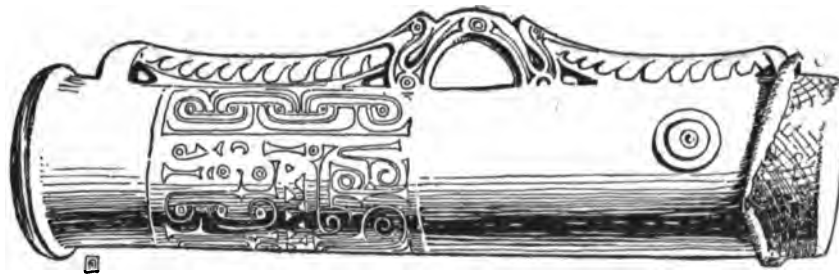


FIG. 90.—Drum, Trobriands. One-third natural size.

The shape of the Trobriand shield is very characteristic, sometimes the surface is quite plain.‡ When ornamented the design is simply painted on

* Cf. "Album," pl. 279, No. 5, and Ratzel, vol. ii., p. 258.

† Cf. "Album," pl. 292, No. 4.

‡ "Album," pl. 283, No. 1.

the smooth and whitened surface of the shield, with black and red pigments.* Mr. J. W. Lindt, of Melbourne, gave me a shield, *vai ova*, from the Trobriands, which I gave to the British Museum.† The design on this shield differs in some points from that which is commonly depicted on these shields.

THE WOODLARK GROUP.

Murua is by far the largest and most important island of this small group.

Fathers Montrouzier‡ and Thomassin§ were the first to give any information about Murua. I have translated the most important of their observations in "Folk-Lore," v., Dec., 1894. MacGregor refers to the "Histoire de la Première Mission Catholique au Vicariat de Melanesie," by Verguet. The Marist missionaries arrived at Murua in September, 1847, and abandoned it in 1852, on account of lack of success. They were followed by some Italian missionaries, of whom Father Paul Reina was Superior, but they seem to have left the island almost immediately, and to have gone to Rook Island. It is probable that the few, but choice, specimens in the Milan Museum were collected by the latter. There is a paper, which I have not seen, by Curti, "L'isola Mujii o Woodlark," Milano, 1862 (estr. dal Politecnico). C. Salerio gives an account of the island and a good map|| (Pl. XII.). Romilly (1886, pp. 127–131) describes a visit there. "The first thing that struck me was the extreme good looks of the women. They are a light copper colour . . . but the men were not beautiful. They were of very small stature; some of



FIG. 91.—Dance-shield, Trobriands.
735 mm. long.

* Cf. Finsch, "Atlas," pl. xii., fig. 2.

† "Album," pl. 345, No. 5.

‡ Ann. pour la Propagation de la Foi, xxii., 1850, p. 88.

§ Loc. cit., xxv., 1853, p. 390.

|| "Über die Inseln im Osten von Neu Guinea," Petermann's Mittheil, 1862, p. 341.

ROYAL IRISH ACADEMY.—CUNNINGHAM MEMOIRS, NO. X.

them were dwarfs, with deformed bodies and gigantic heads. In 1889, p. 54, he writes that the "dwarfish little men were active and well formed."

The latest information is that given by Mac Gregor (C. A. 1—1892, pp. 4—8). He says:—

"Of the people of Murua generally a favourable opinion was formed. They are active and intelligent, enterprising, and disposed to trading. They are clearly of the Papuan type. They have not got the broad cheeks, the lighter bronze colour, and slightly almond-shaped eye of some of the Nado men. The stone adze has disappeared so completely that it is difficult to obtain a specimen for the official collection. Their arms are the spear and shield, the tomahawk and large knife. The spear is generally made of a kind of ebony, which takes a fine polish. The shield is made of a light soft wood, and has a device painted on it in white, red, and black, usually representing two snakes about to seize two birds. Food is plentiful. When people die they go "like the wind" to a small island called Watum, near Ugawaga, and there they always remain. There is a chief there called Paidogo, who came originally out of the ground. . . . There seems to be only one language spoken on Murua."

NADA (LAUGHLAN ISLANDS).

A valuable Appendix (EE) to the Annual Report of British New Guinea (C. A. 1—1892, pp. 104, 105, reprinted in "Journ. Anth. Inst. *xxi*. 1892, p. 483), by Mr. W. Tetzlaff is entitled "Notes on the Laughlan Islands." The Laughlan Group consists of seven small islands. The land is very poor, and little else but the coconut will thrive. The population, of about 240, is thus mostly dependent on fish and other marine produce. Yams, bread-fruit, and sweet potatoes they import from Murua (Woodlark Island). They usually start at the end of November with the south-east, and return about the end of December with the north-west monsoons. They marry out of their island. The children belong to the mother. At death the father's property goes to his relations, and the mother's to the children and her relations; the same law holds good for Murua and the Trobriands. They believe the spirits of the deceased go to Wartheum,

a small island in the Trobriands Group. They have a tradition that the women, from whom the islands derived their several names, came originally from Murua. Customs relating to birth, death, sickness, games, are given, and one or two short legends on the moon and fire. *Cf.* also Mac Gregor, C. A. 1—1892, p. 9; or, C. 6323. 1891, p. 205; and Romilly, 1886, p. 130, who says that "the people are precisely the same [as those of the Woodlarks] and the same as the Papuans of the east coast of New Guinea. They are extraordinarily friendly. . . . They never fight. . . . There were the same good looks among the women here as in the Woodlarks, but the men were a finer lot."

VIII.—Summary.

In speaking of the art of this District, Dr. O. Finsch says* :—
"Prominent are the involved patterns of the engraved decorations of the wooden implements; the most consist of elegant scrolls, and are characteristic for the whole south-east New Guinea. Indeed, the D'Entrecasteaux, with Trobriand, the east promontory of New Guinea, and the neighbouring archipelago, as far as Teste Island, and probably also the Louisiade, constitute a single ethnological province, which is distinguished by many peculiarities." . . . "Besides frizzly and ringletted hair, I also noticed here some which was straight, and of a natural fox-red colour, as we know it in Europe, a colour which I had not hitherto seen among the Papuans." It should, however, be borne in mind that the Melanesians frequently rub lime or wood ashes into their hair to kill the vermin, and this temporarily turns the hair of a reddish colour. On p. 226 we read :—"The whole brown native stock of the D'Entrecasteaux, eastern point of New Guinea, the Moresby Archipelago, and as far as the Louisiade are all man-eaters; this custom constitutes another character of this ethnological province."

The last remark of Finsch's probably requires some qualification; the French Missionaries say that the natives of Murua regard with horror the cannibal habits of the neighbouring islands.

* "*Samoafahrten*," pp. 212, 216.

A glance over figs. 51–92, and Pl. XII. will indicate, better than any description, the general style of the decorative art of this District. Here only do we get a preponderance of curved lines; scrolls and spirals are everywhere, as well as loop coils, the continuous loop coil pattern, and the guilloche. In other Districts of British New Guinea, when the artist is dealing with patterns, or with decorative art pure and simple, as apart from religious or emblematic art, the almost invariable tendency is to degenerate into straight or angled lines and patterns. Strangely enough, on the Fly River, spirals and curved lines are frequent, as may be seen on reference to Pl. v.; but looped coils, either isolated or continuous, and the guilloche, are entirely absent, and there is a marked difference in the elegance and symmetry of the Fly River and Massims designs. There can be no doubt that the latter belong to a higher plane as regards technique, precision of design, a feeling for symmetry, and the skill with which the raw material,



FIG. 92.—Rubbing of part of the carved rim of a wooden bowl in the Author's Collection. Probably from the Woodlarks or Trobriands. One-third natural size.

so to speak, of their decorative art has been adapted to the objects or the surfaces to be ornamented.

Usually the designs are cut with boldness and with a sufficient degree of symmetry. The intaglio portion is filled in with lime, and as the wood is usually black, or very dark, and smoothly polished, the total effect is extremely pleasing. Sometimes the triangular spaces of the scroll-patterns are filled in with red, the rest of the intaglio being white (fig. 53). Very rarely all the triangles of one side of the pattern are red, and those of the other black. I have, for example, a wooden bowl from the Trobriands, Woodlark province, the pattern (fig. 92) on the rim of which is a series of conventional crocodiles' heads, somewhat similar to figs. 184, 202, Pl. XII., the triangles circumscribed by the jaws are filled in with red, while those above the upper jaws are blackened.

Naturally all those who carve are not skilled artists, and some objects in collections, of which the carving is poorly executed, the more recent of these are almost certainly objects which were prepared for the purpose of barter with the traveller or trader.

The most ambitious artistic efforts are essayed upon the canoe ornaments; illustrations of these carvings may be seen on Pls. 278, 286, 288, of the "Album." As I have by me a large collection of rubbings, photographs, and sketches, I had hoped to be able to unravel some of these intricate designs, and to trace out the various stages of increasing and decreasing complexity; but I have already reached the extreme limit of the illustrations allowed me, and so must leave this promising inquiry for a future occasion, unless some confrère makes it his own in the meantime.

The illustrations I have given of the bird's head variants, and of the bird and crocodile motive, will render an analysis of the more involved carvings of this District comparatively easy.

The Ethnology of this District is discussed in the concluding section of this Memoir.

THE NORTH-EAST COAST OF BRITISH NEW GUINEA.

There is at present very little information respecting the north-eastern coast of the Possession. For the sake of convenience I have already dealt with that part of this coast which extends from East Cape to Baunia (Bartle Bay). The cape to the east of the latter is Girumia (Cape Frere). The large Goodenough Bay is bounded on the north by Sebiribiri (C. Vogel); then follow Collingwood Bay, Dyke Ackland Bay, and Holincote Bay. Boundary Cape and the rocky islet, Mitre Rock, are practically on the boundary between the British and German Territories.

Captain Moresby was the first to explore this coast, and the following is his account of the natives he met with:—

“We were surprised to find that the houses here were not built on poles nor saddle-roofed, but thatched close down to the ground, and of an oval form. The canoes were somewhat differently constructed, and the language was wholly different. It seemed to us, then, that Cape Frere [Girumia] was the dividing point between the two languages and styles of house-building; but further to the westward we observed that the Malay building on poles recurred” (p. 267). In Goodenough Bay the natives “are of a dark copper colour, and look intelligent” (p. 268). The Collingwood Bay natives, “a dark, dirty-looking people, wholly destitute of clothing, were very shy, and difficult of approach” (p. 270). At Spear Islets, near Portlock Bay [the north side of the promontary between Collingwood and Dyke Ackland Bays, lat. 9° S.], the natives “were quite unclad, repulsive looking, and of a darkish colour, and wore their hair in long, ugly ringlets, like pipe-stems. Their canoes were of a kind new to us, &c.” (p. 271).

Mac Gregor alludes to visits to Girumia and Baunia (C. A., 1—1892, pp. 11, 63), and describes the natives of the coast near Cape Sebiribiri. The small, oblong, pile-dwellings usually have the space between the floor of the house and the ground roughly closed in with coconut leaves.

They are beginning to learn the use of tobacco and iron. "They cook in wide-mouthed clay pots, profusely ornamented" (p. 11). In Collingwood Bay, near Keppel Point (about lat. 9° 15'), the men "employ a wooden shield, covered by plaited cane, and shaped like a small Gothic window, about two and a-half feet long and a foot broad at the lower end" (p. 12). "They eat the betel-nut, but they possess none of the dexterity in carving limespoons, &c., so conspicuous in the Trobriand Group. They do not tattoo. They seem to cut off the eyebrows instead of pulling them out, and many wear beards. . . . The village consists of a number of separate houses for family use, apparently each large enough for only one; but there is a large club-house . . . only a roofed shed. . . . The houses are very inferior. A peculiarity of the houses here, which was observed in general use on this coast as far as the boundary, is that on one side there is a verandah formed by carrying the roof of the house down in the same plane until it is about three feet from the ground. A platform is built under this. Their spears are made of palm-wood. . . . The form of salutation known to these people seems to be to touch the nose and the navel. The canoes are made of a single tree, about thirty-five to forty feet long, sharp at each end, and provided with a very small outrigger, which is at an unusually great distance from the canoe. The men were greatly afraid, and fled precipitately on seeing a looking-glass. They did not understand the use of iron, and had no wish to obtain any. Of tobacco they were, of course, quite ignorant, and we found that the pieces of bamboo they carried were used exclusively as nose-flutes, and not as pipes. . . . Here, for the first time in the Possession, we found people using stone adzes of a stone resembling jade in colour. . . . They would not exchange these for steel. They seemed to be the only kind of adze used in the head of Collingwood Bay and in the lower half of Holincote Bay, when they begin to be mixed with adzes of basalt" (p. 13).

Mac Gregor next visited Holincote Bay, and on August 2nd, 1890, returned to the natives of Lina Bay, the palm-wood spears, stone clubs, jade adzes, corsets of Job's tears, armlets, nets, shields, lime-spoons, &c., that had been pillaged from them by Dr. L. Loria early in January of the same year.

Near the boundary MacGregor made friends with natives "of the ordinary Papuan type. . . . They do not tattoo. They use adzes of jade or basalt and disc-shaped stone clubs of the latter material. They laughed at the idea of giving one of their weapons for anything we could offer them instead. Of iron they knew nothing, . . . tobacco they would not accept. . . . In almost every known tribe in the Possession the presence of hair on the face is considered highly out of fashion; but in this tribe several men wore false whiskers from ear to ear round the point of the chin" (pp. 16, 17). "The most gratifying result of this inspection was the establishment of friendly relations with so many tribes at all the chief centres of population, and to find that they so readily responded to our overtures" (p. 18).

So far as I am aware no specimens of decorative art labelled as coming from the north-east coast of British New Guinea occur in any European museum. Dr. H. O. Forbes has kindly sent me for inspection a piece of tapa that he obtained at Port Rawdon, in Goodenough Bay, on the south side of the Cape Vogel Peninsula. The tapa, which is part of the costume of a man, is decorated with four broad painted bands. Each band has a central and lateral stripe, consisting of a red line bounded on each side by a black one. The two areas thus formed in each band are filled up with diagonal black lines, arranged in such a way as to produce irregular triangles. The hatching of the triangles is alternately right and left. The spaces between the diagonal black lines are alternately red and white. The edges of the black lines bordering the latter are scalloped. The piece of tapa is about 1200 mm. long, and from about 800 to 900 mm. broad.

GENERAL CONCLUSIONS.

My chief object in writing this Memoir has been to collect facts concerning the decorative art of the inhabitants of a limited geographical area, and to present them in a convenient form. I have endeavoured to reduce speculation to a minimum. Nothing is easier than to make guesses as to the origin or meaning of a particular pattern or design; but in most cases, if a sufficient number of examples and variants be brought together, no theory is required: the facts speak for themselves. It is extremely hazardous to attempt to explain a design in one district by examples taken from another locality; in the great majority of cases error alone will result. Certain simple patterns are found in different parts of the world; so far as decorative art is concerned, they are the same pattern, but when their history is elucidated they can be proved to have had a different origin in each district. The patterns are similar, but they are not the same; or, to use the terms of biology, they are homoplastic but not homogenetic. Analogy has too often been mistaken for homology, here as elsewhere. The meander, or Greek fret, pattern is a case in point. I have also drawn attention on p. 135 to a simple looped pattern which, even in British New Guinea, has had a double origin, and it is met with in Australia, Europe, and other places. The similarity between the typical scroll-patterns of the Massims and those of New Zealand has tempted General Pitt Rivers (then Col. Lane Fox) to say:—"There is also an almost perfect identity in certain forms of ornamentation in New Zealand and New Guinea which seems to afford proof that frequent intercourse between those islands must have existed in former times."* The origin of the New Zealand scroll-patterns has yet to be traced; but judging from the evidence before me, it is certainly not a bird derivative. I do not know of any facts which would support the view that there ever has been

* Journ. Anthropol. Inst., vi., 1876, p. 115.

intercourse between New Guinea and New Zealand. I allude to this view more as a warning of the caution that is necessary in such questions than to combat this particular instance.

In studying the decorative art of any district two essentials must be adhered to—(1) a restriction of attention to that particular district, and (2) practically no restriction as to the amount of the material to be examined. When the latter points to a foreign origin or influence, then, and then only, should that suggestion be followed out.

It is often very difficult to determine whether a given pattern or design is indigeneous or introduced, and, if the latter, whether it betokens a migration of a people, or whether it has been carried solely by trade. More information must be gathered, and the art of other peoples must be studied before wide generalisations can be made, and before this method of study can be applied with profit to prehistoric archæology.

Good work in the study of decorative art from a scientific standpoint has been done by Messrs. H. Balfour, F. H. Cushing, P. Ehrenreich, W. H. Goodyear, E. Grosse, A. Grünwedel, W. H. Holmes, H. Colley March, J. Edge Partington, A. Pitt Rivers, C. H. Read, K. von den Steinen, H. Stolpe, S. Tsuboi, E. B. Tylor, M. Uhle, H. V. Stevens, and others; but there is a great deal more yet to be accomplished.

The problems before us are not merely the geographical distribution of designs or the evolution of patterns, but we also have to consider the psychological and the ethnological aspects of decorative art.

The style of the favourite designs, the manner in which they are presented, the technical skill, the scheme of ornamentation, the underlying motives, all these, when properly approached, will yield a valuable analysis of the mind and method of the work of the people whose artistic work is studied. As patterns have a wonderful vitality, and, thanks to the retention of the old and the familiar, which is so strong a trait in most people, not only can the psychology of recent folk be studied, but also, to a certain extent, that of their predecessors.

One conclusion which has forced itself upon me is that the decorative art of a people does, to a certain extent, reflect their character. A poor, miserable people have poor and miserable art. Even among savages

leisure from the cares of life is essential for the culture of art. It is too often supposed that all savages are lazy, and have an abundance of spare time, but this is by no means the case. Savages do all that is necessary for life—anything extra is for excitement, æsthetics, or religion; and even if there is abundance of time for these latter, it does not follow that there is an equivalent superfluity of energy. The white man who has trained faculties, and overflows with energy, is inclined to brand as lazy those who are not so endowed. In the case of British New Guinea it appears pretty evident that art flourishes where food is abundant. As a rule, good feeding makes strong, lusty men, who, in the exuberance of their vitality, maraud their weaker neighbours, and who, in a few places, may even eat them. Cannibalism, as it exists in New Guinea in varied and usually attenuated form, appears to be largely connected with sympathetic magic, the eater gaining the good qualities of the eaten. It seems that the occurrence of cannibalism in the Protectorate has been greatly exaggerated by writers, but where it has been proved to occur we find that the perpetrators are among the most energetic and promising tribes. Several authors have spoken in high terms, not only of the intelligence, but of the character of Papuan cannibals, the Rev. Dr. S. Mac Farlane, one of the pioneer missionaries adds, that they exhibit “great skill and taste in earving.”* One is perhaps justified in making the general statements that the finer the man the better the art, and that the artistic skill of a people is dependent upon the favourableness of their environment.

Another important problem is the relation of art to ethnology. So far as our information goes, it appears that the same processes operate on the art of decoration whatever the subject, wherever the country, whenever the age—another illustration of the essential solidarity of mankind. But there are at the same time numerous and often striking idiosyncrasies which have to be explained. Many will be found to be due to what may be termed the accidents of locality. Natural forms can only be intelligently represented where they occur, and the materials at the disposal of the artist condition his art.

* “Among the Cannibals of New Guinea,” 1888, p. 104.

The ethnological aspect of decorative art is too complex a problem to be solved at present, as sufficient data have not yet been collected. So far as I am aware, Dr. H. Stolpe, of Stockholm, was the first to seriously attack this subject. In an extremely suggestive Paper* he summarises the result of his investigations which have extended over a decade.

It was not until I had definitely embarked on the same line of research that I found I was following in the footsteps of the Swedish savant; fortunately our work did not overlap to any serious extent. I have elsewhere† thrown out the following suggestion:—"It will often be found that the more pure or the more homogeneous a people are, the more uniformity will be found in their art work, and that florescence of decorative art is a frequent result of race mixture. The art of the Trobriand, Woodlark, and Massim Archipelagoes supports this conclusion." On the other hand, Is the luxuriance of art in the Papuan Gulf to be ascribed to local or racial causes?

I have just suggested that prolific art work may be dependent, to some extent, upon leisure due to an abundance of food, but this will not account for artistic aptitude, though in process of time the latter may be a result of the employment of the leisure; still less will it account for the artistic motives or for the technique.

Without doubt the art of a people has an intimate relation with their religion (using this term in its widest significance). A considerable portion of savage art is, or has been, primarily religious in character. In illustration of this I need only refer the reader to three Papers recently published on the decorative art of the South Pacific: that, by Stolpe, to which I have already drawn attention; "Origin and Sacred Character of certain Ornaments of the South Pacific," *Journ. Anthropol. Inst.*, xxi., 1891, p. 139, by C. H. Read; and "Polynesian Ornament a Mythography, or

* "Utvecklingsföreteelser i Naturfolkens Ornammentik," originally published in *Ymer*, in 1890, has been translated into English: "Evolution in the Ornamental Art of Savage Peoples."—*Trans. Rochdale Lit. and Sci. Soc.*, 1892; and into German: *Mittheil. Anth. Gesell. Wien.*, 1892, xxii., p. 43.

† "Illustrated Archæologist," i., 1893, p. 108.

a Symbolism of Origin and Descent," J. A. I., xxii., 1893, p. 307, by H. Colley March.

The religion of a people is as much an anthropological datum as the weapons they employ, the houses they build, the clothes they wear, or the language they speak, and, we may also add, the style of their art. In tracing racial affinities, or the migrations of peoples, all factors have to be taken into account.

The broad features of the ethnography of British New Guinea, according to our present information, may be summarized as follows:—There is still much discussion concerning the limitation of the term Papuan as applied to people, and even whether its use should not be abandoned, as Professor Sergi suggests. The Italian anthropologist employs the term Melanesian, not only to comprise the natives of the western Oceanic islands, embracing New Guinea and the adjacent islands, but also to include Australia. At present I adhere to what Mr. Ray and myself* have considered to be the most convenient course, and to confine the term Papuan for what appear to be the autoethones of New Guinea. By Melanesians we understand the present inhabitants of the great chain of islands off the east of New Guinea and extending down to New Caledonia. These terms are used to designate peoples, not races; neither are pure races, and at present we are unable to gauge the amount of race mixture in either, or even to state precisely what are their components.

From the boundary of Netherlands New Guinea, to about Cape Possession, on the eastern coast of the Papuan Gulf, and inland from these coasts, the natives are dark, frizzly-haired Papuans, typically they are a dolichocephalic people, and rather short in stature.

The Papuans also occupy the larger portion of the south-east peninsula of New Guinea; but along the greater part of the coast line from Cape Possession to the farthest island of the Louisiades is an immigrant Melanesian population, about whom I shall have more to say presently, and who have amalgamated with the Papuans to a variable extent in different localities.

* Proc. Roy. Irish Acad. (3), ii., 1893, p. 509.

The following facts will clearly bring out the essential distinction between these two people:—

We have not at present a sufficient amount of data on the physical characters of the two peoples, by skilled observers, to enable us to formulate what differences there may be between them. There is no doubt that the Papuans are more uniformly dark than are the Melanesians (I am now referring solely to the Melanesians in British New Guinea), and their hair is as constantly frizzly. A little later on I give some quotations from travellers concerning the colour of the skin and nature of the hair of the Melanesians. The features of the former are coarser, and they are often much more prognathous. Judging from my experience of the Western Papuans, and from numerous photographs I have seen, the Papuan men usually sit with their legs crossed under them, like a tailor, whereas the Melanesians squat like a Malay, usually with their haunches just off the ground. I do not know whether this rule holds good for the Papuans of the south-east peninsula.

The Western Papuans may or may not scarify their skin as in Torres Straits,* Daudai,† and up the Fly river,‡ but they do not tattoo; the Melanesians tattoo themselves, especially the women.§ Tattooing has, however, spread to a certain extent among the Papuan hill tribes of the peninsula.||

The initiation of the lads into manhood is accompanied with sacred ceremonies in some of the Papuan tribes,¶ but so far as is known by none of the Melanesians. Masks are worn during these ceremonies, and the bull-roarer** swung and shown to the lads; quite recently Chalmers has discovered the bull-roarer about the estuary of the Fly River (p. 74). There is no record of a bull-roarer among the Melanesian folk. I have previously (p. 102) referred to the only other Papuan record.

* Haddon, 1890, p. 366.

† Beardmore, pp. 460, 468.

‡ Mac Gregor, C. A., 105, 1890, pp. 43–51.

§ Cf. p. 171, *ante*; and Joest, "Die Tätowierung."

|| Pages 159, 182, *ante*.

¶ Haddon, 1890, pp. 408, 432; 1893, p. 10; and *ante*, pp. 107, 108.

** Haddon, 1890, p. 432; in connection with fishing, and probably to raise a wind, 1893, p. 20; in some islands as a childrens' toy, Journ. Roy. Inst. Gr. Britain, 1890; *ante*, p. 102.

I have given (1893) a classification and description of various kinds of dances in Torres Straits. Romilly* says: "In the south-eastern archipelago dances are very rare, nor have I ever seen one. Such dances as there are have been described to me as only performed after a feast. No superstitious importance is attached to them, and the details do not bear repetition. But to the westward, in the Gulf of Papua, symbolic dances are constantly performed, and much superstitious importance surrounds them." I have noted, in preceding pages, the few references that there are to the dances of the Melanesians. Chalmers† compares Motu and Motumotu dancing customs.

Social organization is very simple in British New Guinea; there is no priestcraft or statecraft. In Torres Straits I discovered totemistic clans, which however, appear to be of diminishing importance—nothing of the sort has been described from elsewhere—but there are indications of clans, with clan-marks or crests, on the Fly River. Throughout the whole of the Protectorate, chieftainship, in the true sense of the term, is absent; a man may acquire personal power through bravery, wealth, or some other cause, but it is not hereditary, and these so-called chiefs have very little influence, even in their own village. The only exception to this state of affairs is in the Trobriand Group.

Women take a good position in British New Guinea, and exercise considerable influence over the men, least so, however, in the Trobriands.

In the foregoing social characteristics, in their lack of hospitality, and in most of their mental traits the Papuans and Melanesians resemble one another, but the Papuans appear to be more noisy and excitable.

Of their weapons, the stone club alone is common to all the tribes. The use of the bow and arrow is confined to the Papuans. Heavy sword-like, wooden clubs, are common among the Melanesians, and the sling is employed in the D'Entrecasteaux Islands. The throwing stick and javelin are used only by the Western tribe of Torres Straits,‡ who have adopted the practice from the Cape York natives. Only the Melanesians make pottery.§ Mr. Ray calls my attention to the fact that pots are called by

* 1889, p. 88.

† 1887, p. 181.

‡ Haddon, 1890, p. 331.

§ Finsch, 1883, with remarks by Miklucho-Maclay, *loc. cit.*, p. 576; and *ante*, p. 149.

the same name in Melanesia and British New Guinea:—Fiji, *kuro*; Espiritu Santo, *kuro*; Motu and Maiva, *uro*; Kerepunu, *gulo*, &c.

The Papuans earlier adopted tobacco, and grew their own before the advent of the white man, but they do not chew the betel to any great extent; at all events, this is the case with the Western Papuans, quite the reverse obtains among the Melanesians.

I had prepared some Tables to illustrate the philological testimony to the mixture of races in British New Guinea, but, as Mr. Ray has presented this so recently* and with so much ability, I would simply refer the reader to that Paper.

If the foregoing be considered along with the artistic evidence I have collected, there will be a sufficient amount of corroboration to demonstrate that two groups of people inhabit British New Guinea. We have now to consider how far a further analysis is possible.

The most typical Papuans in the British Protectorate are probably the bush-tribes from the Dutch boundary to the back of the Gulf of Papua.

The Torres Straits islanders are certainly more allied to the Papuans than to the Australians, but they are by no means pure Papuans. The skulls of some of them are larger, more massive, and much broader than the typical Papuan. Quatrefages and Hamy† have drawn attention to the mixture of races that exist here. The French savants distinguished a "Negrito-Papuan" and a "Papuan" element in the island population. Mr. Ray and myself have shown that the languages of the two island tribes have Australian affinities; but it is evident that the Western and Eastern tribes have independently migrated from the adjacent mainland of New Guinea. I shall on a future occasion discuss the ethnology of these people.

The Daudai tribes, together with those inhabiting the banks of the Fly, Bamu, Kikori, and other rivers which flow into the Papuan Gulf, along with the coast natives, are all Papuans, and apparently closely allied. I believe that the Fly River has been, to a certain extent, what may be termed a "culture route," and that the natives of the higher

* Journ. Anthropol. Inst., xxiv., 1894, p. 15.

† "Crania Ethnica," pp. 207-210, 253-256.

reaches have indirect communication with those of the north coast of New Guinea.* The people of the coast line repress the "bushmen" or inland tribes. This is the case in Daudai, and apparently is so to the east, *i. e.* on the north of the Papuan Gulf. We cannot at present say whether this is the expression of a slight migratory current, or whether it is a question of a better fed, and therefore stronger, people oppressing their weaker neighbours. Macfarlane † was the first to promulgate the former view, and he groups the coast folk with the Motu immigrants. He contrasts the high and broad skull of the coast people with the "long, narrow skull, with its low forehead and prominent zygomatic bones," of the bush tribes. He also states that the latter are "greatly inferior both mentally and physically." He continues:—"I have seen amongst the coast tribes, especially amongst those to the westward, various types of features, apparently indicating a strange mixture of Malayan, Papuan, Chinese Arabian, and even Jewish races. The hair is generally frizzly, but never woolly. In infancy it is always straight. . . . A few have straight hair, which is always black. The nose is generally aquiline, and the lips, though differing very much in individuals, are usually well formed. The body is strong and muscular, and the limbs symmetrical. They are an energetic, demonstrative, jocular, joyous, laughter-loving race. We noticed these particulars, more especially amongst the tribes to the eastward, although they are common to all the tribes whom we have met."

* For example, the rattan armour collected by D'Albertis (II., p. 125, fig. on p. 126) on the Alice River, a tributary of the Fly River, about lat. 6° S., is similar to that obtained by Finsch from Angriffs Hafn, near Humboldt Bay (Samoafahrten, p. 337, and fig.; Annal. nat. Hofmus. Wien, 1891, p. 78, pl. xxiv., fig. 7, published in 1888), and recalls the coir armour of Micronesia. It is probable that this was the route by which tobacco found its way to Torres Straits and the Gulf District, and thence to the south-east, where it is only gradually and locally being employed. "This tobacco, the occurrence of which on the Fly River, 570 miles from its mouth is a mystery, has been successfully sown in Brisbane, and has been pronounced by London experts as of extraordinary value on account of its fitness as cigar-wrappers."—Mac Gregor, C. A., 105. 1890, footnote to p. 58. I suspect also that the *baratu* (p. 78, pl. v., fig. 77), collected by D'Albertis, are of the nature of talismans analogous to those (erroneously called *Karwars*) from the north of Netherlands New Guinea. Perhaps they have relation to an ancestor-cult.

† "Notes from New Guinea."—*Athenæum*, No. 2562, 1876, p. 725.

D'Albertis (ii., pp. 377, 381) alludes to four types of skulls that he collected—(1) at Kiwai; (2) near Canoe Island, fifty miles up the Fly River; (3) in the interior; (4) from Baduhubere,* “bush” tribe.† Quatrefages and Hamy (p. 256) refer to these types.

From hints expressed by some travellers, it seems that the natives to the north of the Papuan Gulf, east of the Aird River, more resemble the hill tribes of the Owen Stanley Range than the Elema or Toaripi. These latter are a particularly boisterous, burly set; and it appears to me that the abundance of food in their swampy country will not explain all the differences between them and the neighbouring tribes.

The hill tribes of the south-eastern peninsula are also Papuans—such as the Koiari, Koitapu, with their subdivisions (Favele, Kupele, Sogeri, Meroka), Kabana, Manukolu, Domara, and Mairu. The last two are coast tribes. Mairu is the native name for Toulon Island; but Chalmers applies the same name to the neighbouring coast tribe as he does in the case of Roro (Yule Island).

South of Cape Possession and round about Hall Sound is a transition district. The Mekeo, Maiva-Kivori tribes, and to a greater extent the Roro and Nala, appear to be Papuans modified by Melanesian influence. Their languages belong to the Melanesian stock. The Kabadi and Doura are also probably more Papuan than foreign. The Motu, Loyalupu (Kerepunu and Hula), Aroma, Sinaugolo, and Saroa have decidedly Melanesian blood in their veins.

Equally pronounced are the Melanesian traits of the people inhabiting the extreme end of the peninsula, the region round South Cape, Milne Bay, Awaiama, and the neighbouring Moresby and D'Entrecasteaux Groups, as well as the Louisiades, Trobriands, and Woodlarks.

It is these Melanesian colonists who have been termed “Malays,” “Polynesians,” &c., by several writers. The lighter colour of the people, and numerous words common to them and the Polynesians (“Eastern

* Mr. Ray has suggested to me that this word is probably “a mistake for the Badu-arubi, which would be Kiwai for Badu-people.”

† Cf. also Journ. Anthropol. Inst., vi., 1876, p. 216.

Polynesians" as they are frequently termed by the missionaries), seem to be the facts on which these identifications are based.

The French officers on board the "Astrolabe" and "Zélée" had a glimpse of the Orangerie Bay natives in 1840. Roquemaurel says:—"This race of men appears to present very different types."* Macgillivray (1852, vol. i., p. 275; vol. ii., p. 77) guardedly suggests "indications of a Malayo-Polynesian influence." Others have stated their views with less diffidence; but scarcely any of the later travellers and writers have been sufficiently trained observers, and so their statements can only be taken as expressing a general idea. I will quote from only a few of the most experienced residents in that part of the country. The first account was written by G. Seymour Fort, apparently in 1885†:—

"Three separate types are met with in New Guinea, the Papuan, Malay, and Polynesian, which are much intermixed. The pure Papuan is only found within a small area in the interior and on some portions of the north-east. The Papuan type, however, prevails, with modifications, throughout almost the whole of the Protected Territory. In stature they are short and squat, low foreheads and prognathous; in character they are noisy and demonstrative, shy and suspicious, with a low estimate of human life, but not aggressively bloodthirsty. Their standard of comfort is low, and they show but little capacity for any higher organisation. The Malay element appears to predominate in the tribes to westward and in the tribes at Aroma and Cloudy Bay district. They are aggressive and bloodthirsty, and are gradually driving back other tribes. They show capacity for a higher organisation. The Polynesian element is most prominent at South Cape, although the Polynesian form of religion is entirely wanting. They have a tendency to be treacherous, and noisy and demonstrative, and the artistic faculty is strongly marked among them. Distinct types of Papuan, Malay, and Polynesian nationality are frequently to be seen in the same village."

In the same Blue Book ‡ the Rev. W. G. Lawes (1886) made a valuable Report on "The Condition of New Guinea," in which he says:—"I am inclined to believe that the coast tribes from Yule Island, eastwards, belong to a distinct race from the inland or mountain tribes. Their language, customs, physique, and habits seem to indicate this. My knowledge of

* "Voyage au Pol. Sud, Hist.," ix., 1846. Notes, p. 336.

† Cf. C. 5883. 1890, p. 43, and footnote on p. 301 of "Australian Defences and New Guinea, from the Papers of Sir Peter Scratchley," by C. Kinloch Cooke, 1887.

‡ C. 5883. 1890, p. 139.

eastern* Polynesians acquired during eleven years' residence on Savage Island [Niue] leads me to recognise the same race in the coast tribes. Westward, from Cape Possession, again, the coast tribes are darker in colour and different in habits, but may, notwithstanding, belong to the same race as the lighter colour to the east" (Macfarlane had made the same suggestion).

Miklucho-Maclay, one of the most experienced travellers in these regions, has written very little. He says† that, in some of the islands of the Louisiades, and from the Bismarck Archipelago to the New Hebrides, possess a well-marked brachycephalic population (many exceed 80, and even 85) "not ascribable to a mixture with another race, and proves that brachycephalism has a much wider range in Melanesia than has hitherto been supposed. Although in some villages of the south coast of New Guinea there is a noticeable Polynesian admixture, yet this circumstance by no means permits of the aboriginals of the south-east peninsula, who are a branch of the Melanesian stock, being called a 'yellow Malayan race,' as has frequently been done of late years." On the other hand, I think most ethnologists will admit that the brachycephalism Miklucho-Maclay records is due to racial admixture, though at present we may not be able to state precisely what this is. The Malay theory, however, must be definitely abandoned.

On the other hand, Drs. Comrie and Finsch, who also speak from personal experience, do not lay so much stress on these differences. The former says:—"As regards colour, the natives of the S. E. coast of New

* Niue is in the West Pacific.

† "A Short Resumé of the Results of Anthropological and Anatomical Researches in Melanesia and Australia."—*Proc. Linn. Soc. N. S. W.*, vi., 1882, p. 171. The few observations in this paper are translated by Miklucho-Maclay from some of the following, which contain most that he has written on New Guinea:—"Schädel und Nasen der Eingeborenen Neu Guinea's," *Zeits. für Ethnol.*, v., 1873, *Verhandl.*, p. 188; "Die Brachycephalie der Papuas in Neu-Guinea," *Z. f. E.*, vi., 1874, V., p. 177; "Einige Worte über die sogenannte 'gelbe Rasse' in Süd-Osten Neu-Guineas," *Z. f. E.*, xii., 1880, V., pp. 90, 375; *cf.* also *Z. f. E.*, x., 1878, V., pp. 111, 116; xiv., 1882, p. 576; "Nature," xxi., p. 227. An account of his work is given by Dr. O. Finsch, "Nikolaus von Miklucho-Maclay, Reisen und Wirken," *Deutsche Geogr. Blätter*, xi., 1888, p. 270.

Guinea may be said to vary from rusty black to a yellowish brown ; while the natives of the immediate neighbourhood of East Cape are of a lightish brown, . . . the features and hair, even in the lighter individuals, remaining unaltered. . . . I was forced to the conclusion that the lighter-coloured people were the same race" (1876, p. 106). The latter (1888, p. 234) writes:—"The natives of Bentley Bay, as at East Cape, are of a tolerably light skin-colour, and belong to what the ignorant would explain as a Malay mixture. But wrongly, for they are true Papuans, amongst whom the individual occurrence of curly, even smooth hair, is of no consequence."

The occasional presence of non-frizzly hair has been noted by Macfarlane. Basil Thomson says that one of the two types in Misima has "straight hair"; and MacGregor speaks of "a few individuals with wavy hair," which generally have "coarse, irregular features," in Duau.

All the foregoing speak from personal observation, but students at home have brought craniological evidence to bear upon this problem. In a valuable Paper, Professor Hamy epitomises the observations of travellers on the physical characters of the people of the Massim District. The additional evidence which I have been able to collect supports the conclusion that there has been a mixture of races. Dr. Hamy sums up the evidence in the following words (p. 512):—"From the examination of the anatomical results thus put in juxtaposition, I draw the conclusion that craniology agrees with the study of external characters, with ethnography and linguistics to make evident the gradual alteration of the Papuan type *from the east to the west*, from Rossel Island to the eastern point of New Guinea. The modifications produced by the Malayo-Polynesian or Indonesian crossings, still ill-determined in their original sources, are, moreover, quite comparable to those which have been observed on the mainland, accentuating *in an inverse manner*, that is to say, *from the west to the east*, from Redscar Bay and Yule Island to the same South East Cape. This last point, corresponding with the neighbouring little islands, Lydia, &c., to the *maximum intensity* of the Malayo-Polynesian or Indonesian influences thus ascertained; one is led to continue the research in tracing in the direction of the straits which, alone, could give passage between the Melanesian

lands to a current of light-skinned people, coming from the north-east or the north."

The craniology of the natives of the south-eastern peninsula and neighbouring islands has been studied by Miklucho-Maclay (1874); Comrie (1876); Flower (1879); Quatrefages and Hamy (1882); Hamy (1888), and Sergi (1892). Most of whom admit, with Flower, "a considerable mixture of races among the inhabitants of this region of the world." When I was in Rome, Professor G. Sergi showed me the fine collection of Massim skulls collected by Dr. Loria in 1891, and he pointed out to me the great diversity which is apparent in them, proving to my mind a more complex mixture than that of two races. Professor Sergi's researches have since been published.* He says:—"The so-called Papuan races are a mixture of many morphological varieties. The varieties are not limited; geographically, to the countries described as Papuan, but extend to all Melanesia, in the usual acceptance of the term, and to Australia; they radiate through Polynesia and Micronesia through the islands situated to the west of New Guinea and to the north of Australia, and some reach the Andaman Islands. The name Papua, therefore, is not only arbitrary, but causes confusion." He proposes to extend the term Melanesia to include the Melanesian Islands of the West Pacific, the Papuan Islands, and Australia.

We have now to consider the linguistic evidence for the identification of the immigrant population in British New Guinea with the Polynesians. This argument is mainly due to the missionaries, and most of the other writers who have promulgated this particular view have done so from the data so carefully collected by the missionaries, and often without due acknowledgment.

When I wrote to my friend, Mr. Ray, concerning this question, he sent me the following essay, which he has very kindly allowed me to incorporate in this Memoir; in this he effectually disposes of the Polynesian theory.

* Boll. R. Acad. Med. Roma, xviii., 1892, and Archiv. f. Anth., xxi., p. 339.

“ARE THE MOTU OF NEW GUINEA EASTERN POLYNESIANS?”

“It must be accepted as an axiom in philology and ethnology, that the direction from which an observer approaches unknown languages or peoples will materially influence his description of them. The languages and customs of a newly-discovered people will naturally be compared with one better known, and if there be any considerable amount of apparent agreement, the conclusion will probably be hastily arrived at, that there is a connection between the newly found and the well known, and there will be a decided tendency to adopt the old as a standard, and to refer the new to it. Dr. Codrington (*‘Melanesian Languages,’* p. 11) refers to this fact as it affects the nomenclature of languages in Oceania:—‘Any observer of the Melanesian languages who approaches from the west, and sees in them much that is the same with the Malay, calls that a Malay element, and calls that which he does not recognise the native Melanesian or Papuan element. One who approaches the Melanesian languages from the East finds much that is common with the Polynesian, and he calls that the Polynesian element, and, again, what he does not recognise the Melanesian or Papuan. But suppose an observer to begin with the Melanesian languages, and, being familiar with them, to advance, on the one side, to the Polynesian regions, and on the other, to the Malayan. He will find in the islands of the Eastern Pacific people of a brown colour, using a language very much of which is familiar to him, but one poorer in sounds, poorer in grammatical forms. He will say that they speak a kind of Melanesian dialect. If, as is conceivable, it had so happened that an English occupation of Australia had made the Fijian language familiar to Australian merchants, officials, and scholars before Englishmen had advanced far enough to the East by India to have come in contact with Malay, then, as Australian commerce advanced westwards from Fiji, and the native languages were found more or less to resemble Fijian, it would certainly have happened that the Melanesian, the Indian Archipelago languages, Malay, Malagasy itself, would have all been found marked by Fijian character, would even by Australian scholars have been said to belong to the Fijian family. It is a matter of chance or circumstance after what member of a family a family of languages is called, just as it is by what name foreigners call another country. The first that comes, perhaps, is the one that gains the place, and it is very likely that is quite inappropriate.’

“We have now to apply these remarks to the description of the languages of South Eastern New Guinea as *Eastern Polynesian*, a term which distinctly implies kinship with the languages of the islands of the Eastern Pacific, and specially with Samoa and the neighbouring islands. For reference on this point it will be convenient to refer to a vocabulary contained in my Paper on ‘The languages of New Hebrides,’ in the Journal of Roy. Soc. of New South Wales for 1893. Besides the New Hebrides vocabularies, this contains 100 words in the principal languages of Melanesia and Polynesia, and also in the Motu of New Guinea. Those who first became acquainted with any New Guinea languages came from Samoa and Niue, where is found the fullest and most complete form of Polynesian speech. The New Guinea language first known

was the Motu of Port Moresby. Now, if we refer to the 100 words already mentioned, we find that 30 of the Motu are the same, or may be referred to the same root as the Samoan, whilst 13 other Motu words are found in Samoan, but are used in a slightly different sense. These agreements are found in all classes of words, and, the Motu being written first, are:—Star (*hisiu, fetu*); Fire (*lahi, afi*); Bird (*manu, manu*); Fly (*lao, lango*); Mosquito (*namo, namu*); Louse (*utu, 'utu*); Tree (*au, la'au*); Leaf (*rau, lau*); Fruit (*hua, fua*); Coconut (*niu, niu*); Bread-fruit (*unu, 'ulu*); Taro (*talo, talo*); Sugar-cane (*tohu, tolo*); Road (*dara, ala*); Boat (*laka, va'a*); Paddle (*hode, foe*); Outrigger (*darima, ama*); Father (*tama, tama*); Mother (*sina, tina*); Woman (*haine, fafine*); Wife (*adava, avā*); Eye (*mata, mata*); Ear (*taia, talinga*); Hand (*ima, lima*); Leg (*ae, vae*); Eat (*ani, kai*); Drink (*inu, inu*); Dig (*goia, 'eli*); Weep (*tai, tangi*); Die (*mato, mato*); Stay (*noho, nofo*).*

"The following may also be compared:—Sun, *dina (sina, white or shining)*; Fresh-water, *ranu (lanu, to wash with fresh-water)*; Night, *hanua-boi*, lit. village dark (*po, night*); Wind, *lai (langi, sky)*; Village, *hanua (fanua, country)*; Smoke, *qa-lahu (asu, smoke)*; Butterfly, *kau-bebe (bebe)*; Male, *maru-ano (matua, grown up, tano, man)*, Tooth, *hise (isu, nose or snout)*; Nose, *udu (ngutu, mouth or beak)*; Come, *mai (mai, hither)*.

"This amount of correspondence in the two languages might naturally be taken as a proof of the connection of the Motu with the Polynesian, especially as the Samoan words which agree with the Motu are substantially the same throughout the Eastern Islands of the Pacific. But they are also common in the Melanesian region, and every word in the preceding list is known in some form in the New Hebrides, taking that Region as typical of Melanesia. This leads to a further inquiry. Did the Motu and the Melanesians receive these words from the Eastern Polynesians? Before answering this it is necessary to observe that the Motu contains numerous words which are in the Melanesian of the islands, and do not appear in Samoan. Examples from the 100 words before mentioned are:—Moon, *hua (vula, New Hebrides)*; Root, *ramu (rambui, New Heb.)*; House, *ruma (suma, uma, New Heb.)*; Arrow, *diba (tipua)*; Spear, *io (io)*; Food, *ani (kani, to eat, New Heb.)*; Man, *tau (ta, New Heb.)*; Child, *natu (natu)*; Head, *qara (qatu, New Heb.)*; Blood, *rara (ra, New Heb.)*; Bone, *turia (suri, Banks Is., sui, New Heb.)*; Bad, *dika (dika, Solomon Is.)*; Red, *kakakaka (kakara, New Heb.)*; See, *ita (gita, New Heb.)*; Barter, *hoihoi (voli, New Heb.)*; Eat, *ani (kani, New Heb.)*; Live, *mauri (New Heb.)*; Go, *lao (lako, Fiji)*.

"This List shows that the Motu and the Melanesian of the New Hebrides stand in the same relation to the Samoan, whatever that relation may be. I have now to show the improbability of the common element being an importation from Samoa, or from Eastern Polynesian. Here I would notice that in the introduction to the Rev W. G. Lawes' 'Motu Grammar,' the Rev. G. Pratt notices 'the numerous divergences from the Eastern Polynesian dialects,' and 'the very large number of words which have no counterpart there.' He gives some examples of the

* In comparing these it must be noted that Motu omits *l* and *ng* and substitutes *d* for *s* and *h* for *v*. Motu *s* is pronounced *ts* before *i*.

divergences, which show that his Eastern Polynesian words are worn down or abbreviated pronunciations of the fuller Melanesian. Thus—

- "1. In Motu, *d* is prefixed, *diho* for *ifo* or *hifo*, *dae* for *ae* or *hake*. But *d* represents a common Melanesian *s*, and *sivo*, *sake*, are very common words.
- "2. '*L* is prefixed or omitted in beginning or middle of a word.' *Lahi* for *afi*, *tui* for *tuli*, *ima* for *lima*.
- "3. Hard *g* is inserted, *tage* for *tas*, but *tage* is a common Melanesian form.
- "4. *M* is substituted for *ng*, as *matama* for *amataga*. Here there is an example of a change between a nasal *m* and nasal *n*. Cf. Maori *ringa*, hand, with the common *lima*.
- "5. Vowels are lengthened—*māta* for *māta*, *mānu* for *mānu*.

"These remarks show that the Motu has preserved a fuller form of the words than the Samoan, and hence, presumably, an older form.

"But there is a more important feature in the Motu language of New Guinea which distinguishes it from the Eastern Polynesian. *Words are not used in the same way.* The grammars of the languages are not essentially different, but in the Polynesian there is a tendency towards simplification which is not found in the Motu. Two examples of this may suffice:—

"1. Motu nouns, denoting parts of the body and relationships when possessed, require a suffixed pronoun. *Lau matagu*, my eye; *Oi taiamu*, thy ear; *la tamana*, his father. Ordinary nouns require the pronoun suffixed to a word *e*. *Lau egu ruma*, my house; *Oi emu hanua*, thy country; *I ena dara*, his road. With articles of food *a* is used instead of *e*. This is exactly the Melanesian use. In Nguna, a dialect of Efate, New Hebrides, the above words are used thus:—*Matagu*, my eye; *talingamu*, thy ear; *tamana*, his father; *suma aginai*, my house; *vanua anigo*, thy land; *pua aneana*, his way. Here the Motu and Nguna words are used in the same way, though a different form of the pronoun is suffixed to the possessive word.

"In Samoan (and other Polynesian languages) there is no use made of a suffixed pronoun with parts of the body or relationships. All nouns alike require a possessive word, which has, however, the same pronouns suffixed as in the Melanesian.

"*lo'u mata*, my eye; *lou talinga*, thy ear; *lona tamā*, his father.

"*lo'u fale*, my house; *lou fanua*, thy country; *lona ala*, his road.

"In these examples *l* is the article, *o* the possessive noun, and '*u*, *u*, *na* the suffixed pronouns corresponding to the Motu *gu*, *mu*, *na*.

"It seems that we must regard the Samoan forms as in a later stage than that of the Melanesian, just as we accept the English, '*man's hand*' as an older form than '*hand of a man*.' The Motu follows the Melanesian rule, and is thus presumably in an older stage than the Samoan.

"2. I have already pointed out (*Journ. Anthropol. Inst.*, vol. xxiv.) that the Motu follows the common Melanesian rule in suffixing certain particles to the root of the verb in order to render it

transitive, or to determine its action upon a certain object. These are conspicuously absent in the Polynesian languages, though the so-called passive terminations in Samoan preserve the identical syllables which are in Melanesia appended to the root in order to indicate the transitive. Cf. the following :—

“Root: *tangi*, to cry. Efate, &c., *tangisia*, to cry for it. Samoan, *tangisia*, be cried.

“Root: $\left\{ \begin{array}{l} \textit{wono} \\ \textit{punu} \end{array} \right\}$, to shut, fill up. Mota, Banks Is., *wonot*, to close up. Samoan, *punitia*, be closed.

“Root: *tango*, to take hold. Banks Is., *tanov*, to touch something. Samoan, *tangofia*, be held.

“Root: *tanu*, to bury. Efate, etc., *tanumia*, to bury it. Samoan, *tanumia*, be buried.

“Much more could be written to show that it is with the Melanesian tongues that the Motu of New Guinea should be included, and not with the Polynesian. The same method applied to the Kerepunu, the Aroma, Suau, and other dialects akin to the Motu, points to the same relationship. The Motu grammar is entirely Melanesian, and non-Polynesian. Such words in the language as are common to it and the Eastern Polynesian are equally common to the whole of Melanesia. Melanesian words which are non-Polynesian are also found in Motu and the allied languages of New Guinea.

SIDNEY H. RAY.”

For a discussion of the ethnology of the Oceanic peoples the reader is referred to an important Paper by A. H. Keane.* In this Paper he introduces the term Sawaiori, as “the collective name for the large brown race exclusively inhabiting all the Eastern Polynesian islands”; they radiated from Samoa, which they reached, starting from the Malay Archipelago before, or at the time of, the Malayan emigration from the mainland of Asia. The Sawaiori† are thus related to the Pre-Malays, or Indonesians: In their easterly migration they skirted the large Western Pacific Islands which were inhabited by a virile, dolichocephalic, black-skinned, frizzly-haired people. Later there has been a westerly drift of the Polynesians; and colonies of these people occur at places along the chain of

* “On the Relations of the Indo-Chinese and Inter-Oceanic Races and Languages.”—Journ. Anthropol. Inst., ix., 1880, p. 254.

† It may, perhaps, prove convenient to adopt the term Sawaiori as a *race* name, retaining the term Polynesian for the people who inhabit Polynesia, in the same sense that Papuan and Melanesian are here employed.

Melanesian Islands. The Polynesians amalgamate in time with the Melanesians, but always more or less impress them with their individuality. Hence we find in many Melanesian islands, living side by side, people with dark skin and frizzly hair, with a light skin and frizzly hair, or with a light skin and curly or nearly straight hair. The customs and mode of life are modified, and the new language tends to supplant the old, because it is a simpler form. Elsewhere ("Academy," 1883, p. 318), Mr. Keane definitely states that "We have Papuans and Melanesians, pure and mixed, speaking Malayo-Polynesian dialects; but no case is known to me of any distinctly Malay or Polynesian people speaking Papuan or Melanesian dialects. So also with the Malayo-Polynesian numeral system, which has naturally obtained a far wider range even than the speech itself."

It is one thing to grant an indirect Polynesian influence in British New Guinea, and quite another to claim a definite racial connection. A comparison of Papuan and Melanesian customs and handicrafts with those of the Polynesian will prove that there is little of real importance in common, say between the Motu or the South Cape natives and the Samoans. I need only allude to the almost total absence of a system of cosmogony, or of a pantheon with a definite mythology; associated with this lack of a theology is the absence of an organised priestcraft. The democratic Papuans and Melanesians have no hereditary chieftainship; and the power of tabu is much more limited than in Polynesia. Strangely enough, these so-called "Polynesians" make pottery, and do not drink kava.*

I had long recognised a Melanesian migration into New Guinea, and had come to the conclusion that a single wandering would not account for certain puzzling facts. For example, I have drawn attention to the artistic deficiencies of the Motu as compared with the Massim people; not only so, but there is a distinct and luxuriant style of art in the latter district which is unlike anything else in New Guinea.

The Motu and allied tribes are remarkably destitute of a religion, and are (or were) at the mercy of the sorcerers of the indigenous hill-tribes; and what is more remarkable, there is no trace of a sacred bird or cult of any

* The sporadic employment of kava in Daudai and on the Fly River has already been noted (p. 11).

animal. They make their pottery by beating a lump of clay into a pot, whereas, according to the two descriptions we have, the Massim women build up their pots with bands of clay.* A careful analysis would probably bring to light many other distinctions between these two peoples. Judging, also, from numerous photographs I have seen, there appears to be a difference in the physiognomy of the Motu and Massim Melanesians.

My knowledge of Melanesia was too slight to enable me to proceed further with this problem; but before the whole of this Memoir had gone to press, Mr. Ray's Paper † brought to light unexpected evidence. This is what he says (p. 32):—

“ With regard to the place of origin of the Melanesian population of New Guinea, it does not seem possible to ascertain the exact quarter from which it has come. There is at first sight much dissimilarity between the languages west and east, between the Motu and Kerepunu on the one side, and the Suau of South Cape on the other. Though this dissimilarity disappears on closer examination, it may be stated that the language of Suau appears very similar to those of San Cristoval in the Solomon Islands, which lies almost due east of South Cape. The Motu and Kerepunu agree more with the languages of the Efate district in the Central New Hebrides.

“ In reference to the direction of Oceanic migrations, the results here set forth are instructive. If the Melanesians, and by inference the Polynesians, were immigrants into the island region, the stream of immigration flowed north of New Guinea, ‡ and not *via* Torres Straits. Melanesians, like those of the islands, have not occupied the western shores of the Papuan Gulf.”

Mr. Ray thus supports Professor Hamy's conclusion (quoted on p. 261) that the immigration came to the east of New Guinea; but the French savant, being impressed with the “Malayo-Polynesian or Indonesian”

* The Motu word for a clay pot is *uro*; Kerepunu, *kuro*. In Espiritu Santo, the only island in the New Hebrides where pottery is made, the pots are called *khuro*. Fragments of pottery are found in Efate, though the art of making it is not now known. These fragments are called *buro*, which may be shown to be the same as *kuro*. The Fijian name is also *kuro*.

† Journ. Anthropol. Inst., xxiv., 1894.

‡ “ I have lately been paying some attention to the dialects of Micronesia, which lie to the north of the Solomon Islands and New Guinea. These are very similar to the Melanesian, and have fuller and more elaborate grammatical forms than the Polynesian. They thus support the theory that the speakers of Melanesian languages entered this part of the Pacific round the eastern end of New Guinea. The languages of the Bismarck Archipelago are decidedly Melanesian. See my Paper in Journ. Anthropol. Inst., 1891, p. 9.”—S. H. RAY.

influences, supposed that a migration wave had set in from the north, between New Guinea on the one hand, and the Melanesian Archipelago on the other.

Further evidence must be collected before Mr. Ray's suggestion can be definitely accepted. The decorative employment of the frigate bird in the Massims and Solomon Islands supports his first proposition; but, on the other hand, inlaying with shell and nacre is very characteristic of the Solomon Islands, and this is absent from the Massims; there are besides many other points of difference. So far as I am acquainted with photographs of natives from the New Hebrides, I do not see any resemblance between them and the Motu; but it must be borne in mind that there can be culture-drift without appreciable actual mixture, though amongst savage peoples the latter must, to a certain extent, be concurrent. I would also remind the reader of Basil Thomson's description of the Roua (Rossel Is.) natives (p. 228), and of the accounts I have reprinted of the Trobriand people.

Definite answers are now required to the following questions:—
(1) Did the main stream of Melanesian migration to the Massims come from the Southern Solomon Islands? (2) Did the Motu and allied Melanesians of the coast come from the Central New Hebrides?*

* "As bearing on the second of these questions, I may notice one interesting point. In New Guinea the large house in the village is called the *dubu*. It is variously described as a 'sacred house' and as a 'chief's platform' (Lawes, 'Motu Gram.,' p. 73). Now *d* in Motu represents *s* in common New Hebrides words; thus *das*, ascend; *daha*, what; *dala*, road; *diho*, descend; *dina*, sun, &c., are in New Hebrides, *saka*, *sava*, *sala*, *siwo*, *sina*. Motu *p* and *b* are nearly the same, and *p* in the Central New Hebrides is interchangeable with *pw*. The Motu *diba*, arrow, is *tipwa* in Central New Hebrides, Nguna. These changes would show that if the word *dubu* exists in the New Hebrides, it would be in the form *supu* or *supwu*. Now, it is remarkable, that in the Banks Islands and New Hebrides, there is an institution called *Supwe*, a kind of society or club. Position in this society gives a certain amount of influence, which casual observers would call chieftainship, though it is quite distinct from ordinary chieftainship. This society has, moreover, its distinct house in each village, which is only used by its members. In the New Hebrides the house is called the *gamal*, a word which is not found in New Guinea. It would appear that the Motu have transferred the name from the institution to the building in which it meets. More information as to the use of the *dubu*, and why it is called 'sacred,' would, no doubt, afford some further light upon this question."—S. H. RAY.

In the foregoing Memoir I have repeatedly alluded to designs or patterns as "geometrical" in style; in no case do I wish to imply that the natives have the least idea of geometry, or of any formulated knowledge of the properties of space, or of the principles of design as studied in our schools of art. Their art work is dictated by their artistic feeling; it is the product of sentiment, not of rules.

The extremely suggestive investigations of Professors Ehrenreich* and Karl von den Steinen† in Central Brazil have demonstrated that designs and patterns which would be classed as being typically geometrical in character, are really conventional representations of natural objects, the great majority being animal forms. I shall shortly publish, in the Contemporary Science Series, a small book on Evolution in Art, in which I refer, at some length, to the researches of these and other investigators. In this book I also deal with broader questions that would be inappropriate to such a work as the present one.

Quite recently,‡ A. Grünwedel has edited an elaborate Paper with very numerous illustrations, showing that in the peninsula of Malacca certain combs are etched with various patterns which have a magical import. For example, one pattern, or combination of patterns, will protect from fever, while another will prevent a fatal illness. Numerous sicknesses are supposed to be averted by the use of these combs endowed with magical patterns.

This latter is another example of the many aspects under which decorative art may present itself. It also demonstrates the fact that the casual and uncritical collector may readily pass over matters which, while apparently simple and meaningless, yet have, to the natives, a very real and well-understood meaning. Some of these Malaccan magic patterns are most innocently simple in appearance, merely consecutive triangles and the like. In Central Brazil a series of triangles represents the women's

* "Mittheilungen über die zweite Xingu-Expedition in Brasilien."—Zeits. für Ethnol., xxii., 1890, Verhandl., p. 89; Beiträger zur Völkerkunde Brasiliens.

† Unter den Naturvölkern Zentral-Brasiliens, 1894.

‡ "Die Zaubermuster der Orang Sémang, nach den Materialien des Herrn Hrolf Vaughan Stevens" (bearbeitet von Albert Grünwedel).—Zeits. für Ethnol., xxv., 1893, p. 71.

article of dress; placed another way they are hanging bats; a double row may indicate a snake; others, again, may be birds; zigzags are snakes; diamonds, with slight variations, represent various kinds of fish. I have, in the preceding pages, given several analogous examples.

It is quite possible that many of the geometrical and more or less formal designs and patterns in use in British New Guinea have an origin which is by no means obvious at first sight. With regard to these nothing of any value can be done at home. If these designs are ever to be elucidated, it can be accomplished only by those living on the spot. Information must be patiently collected, critically examined, and carefully compared and checked. In no case should the investigator theorise; it is the natives' explanation that is required. When it is discovered what a design represents, then the reason for its employment should be discovered, and whether it has or has had any religious signification.

Hume Nisbet is, I believe, the only professional artist who has visited the mainland of British New Guinea, and it is with interest one turns to his opinion of his Papuan fellow-craftsmen. The following is extracted from a Paper on "Papuan Art," in *The Chronicle of the London Missionary Society*, Nov., 1888, p. 499; it is reprinted in his "A Colonial Tramp," 1891, p. 233:—

"The Papuan is a born artist. He likes to decorate himself and all that he has about him, and has the true antique instinct for lines and colours; hence he values the limbs which God has given him too much to hide them under costume of any sort. . . . But, although he despises dress, he spares no pains to improve upon nature according to his lights and traditions. His hair is frizzled and embellished with flowers and feathers. He wears rings—finger-rings, earrings, and nose-bars, armlets, and necklaces. . . . But in these ornaments, as in the colours with which he sometimes paints himself, there is nothing garish or discordant. The Papuan decked up and painted is a picture of unity and harmony.

"The woman has her grass petticoat and her tattooed breast, which looks like a tight-fitting jersey. I have two *raumas*, or petticoats, before me, the under one of two colours, dusky-red and low-toned yellow; the upper one broad-grey and dun-tinted reed stripes. I never saw a gaudy colour all the time I was there.

"Out of about two dozen carved arrows which I have there is not one alike in the design, and all are lovely and quaint, showing in each line the decorative translation of a natural object.

"Their hair-combs and lime-spoons show the same loving, tender work, over which time has not been an object, as in their canoe prows, native pipes, or *bau-baus*, and lime calabashes;

designs worked out without knives, with bits of sharpened shells or fire-brands, infinite labour expended with observation; intellect finding the crafty hands, producing results which I regard with amazement and hope—amazement at the workers themselves, and hope for the future before them; if the white man is content to lead them onwards."

In the latter work he also says:—"Their calabashes and bau-baus, or native pipes, are also wonderful in the symmetry and beauty of their designs, no two being exactly alike. These designs they take from passing events or surrounding objects—flowers, passing clouds, animals, fish, and all sorts of incidents, which they transfer to ornamental scroll-work, working freely, yet always telling their story with definite purpose. The colouring which they use is always quiet and subdued; no glaring reds or blues or greens, but, soft tones of brown, yellow, black, and white" (p. 183).

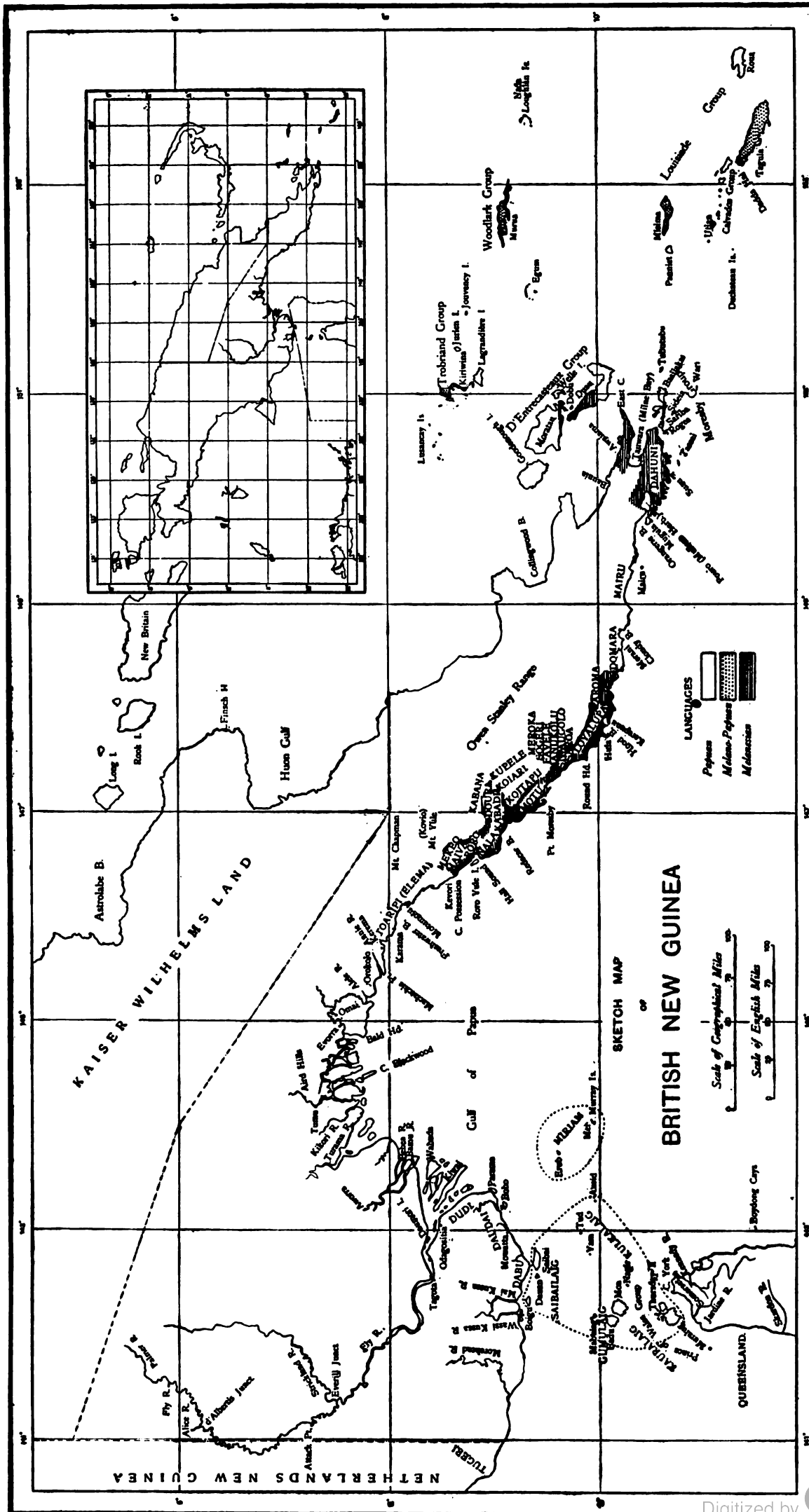
These remarks are on a par with a great deal of Mr. Nisbet's writing on New Guinea. It would be very interesting if he could produce designs taken from passing events, flowers, passing clouds, and all sorts of incidents, transferred to ornamental scroll-work. It is rather remarkable that no such object has, to my knowledge, found its way to any European museum. According to my experience, the natives will gladly employ glaring red, in the form of red lead, if they can get it, and are very fond of imported bright blue—a colour which they cannot obtain locally. Much as I admire their artistic skill and taste, I am afraid that they use subdued colours because they can obtain no others—they employ the brightest they can get. I do not quite understand what Mr. Nisbet means by "soft tones of black and white," in connection with Papuan art.

The artistic sense of a people must not only be judged by what they actually do, and from our point of view. The employment of subdued colours and soft tones may merely mean that their resources admit of none other. If the people will have none of our bright reds, blues, or yellows, then we may admit that they do prefer the quieter tints; but is this the experience of travellers? Again, the effect of most of the designs burnt, for example, on bamboo tobacco pipes is to us very pleasing, not solely on account of the designs themselves, or the scheme of decoration—these we probably share with the artists who did them—but the slight blur, caused

by that particular process, tones down the outlines, and gives a mellow tone to the decoration which is pleasing to our æsthetic sense. We do not know that the natives prefer this particular effect, but we know it is incidental to the technique, and that in some places it is largely obviated by the design being first scratched on the rind of the bamboo.

The art of a people may perhaps be best judged by what they need not do and yet accomplish. The resources at their command, the limitations of their materials, are very important factors, but we must not, at the same time, ignore what they would do if they could, nor should we project our own sentiment too much into their work. In this, as in other branches of ethnographical inquiry, we should endeavour to learn all we can about them from their own point of view before it is too late. At the present stage, knowledge will not be advanced much by looking at laggard peoples through the spectacles of old-world civilization.

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This Map has been kindly lent by the Council of the Anthropological Institute. It illustrated Mr. S. H. Ray's Paper—"The Languages of British New Guinea," Journ. Anthropol. Inst., xxiv., 1894. It is probable that Melano-Papuan languages are spoken in all the islands of the Trobriand, Woodlark, and Louisiade Groups, and Melanesian languages

in all those of the D'Entrecasteaux and Moresby Groups, as well as on the adjoining mainland. We have no information concerning the languages spoken on the north-west coast of British New Guinea. The Domara, Mairu, and the Hill Tribes so far as is known, together with all the tribes to the west of Cape Possession, speak Papuan languages.

BIBLIOGRAPHY.

A VALUABLE "Bibliography of New Guinea" was compiled by Mr. E. C. Rye in 1884 (Roy. Geogr. Soc. Supp. Papers, I.), and this has been brought up to date by Herr J. D. E. Schmeltz in 1893. But the latter author has done more than this, he has added a number of distributional and bibliographical notes to the Memoir which he has collaborated with F. S. A. de Clercq, and has given tables showing the distribution of a large number of Papuan objects and customs. In the appended Bibliography will be found the more important works of Dr. O. Finsch, to whom students of the anthropology of the Western Pacific are so greatly indebted. No one interested in Papuan ethnography can dispense with his "Samoafahrten," the "Ethnological Atlas," or the highly important series of papers in the "Annalen des k. k. naturhist. Hofmuseums" of Vienna from 1888–1893. The "Ethnographical Album of the Pacific Islands," drawn by J. Edge-Partington, is as invaluable to students of ethnology as it is to collectors and curators. The Rev. W. G. Lawes, of Port Moresby, has taken a large number of most excellent photographs illustrating Papuan ethnology, and he has generously deposited the negatives with Mr. H. King, George-street, Sydney, N. S. Wales, in order that anthropologists might have the opportunity of purchasing authentic photographs. Mr. J. W. Lindt, of Melbourne, too, has numerous beautiful photographs; but the best of these are now published in his "Picturesque New Guinea."

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The following list does not profess to be exhaustive, but it includes all the more modern books and papers known to me which have any ethnographical value:—

- BEARDMORE, E. (1890): "The Natives of Mowat, Daudai, New Guinea."—*J. A. Inst.*, xix., p. 459 (with additional notes).
- BEVAN, T. F. (1888): "Mr. Theodore F. Bevan's Fifth Expedition to British New Guinea: Preliminary Presentation Pamphlet." (Illustrated.) Sydney.
- BEVAN, T. F. (1890): "Toil, Travel, and Discovery in British New Guinea." London. (Cf. also *Proc. Roy. Geog. Soc.*, 1887, p. 595; 1889, pp. 82, 90.)
- CHALMERS, J., and GILL, W. WYATT (1885): "Work and Adventure in New Guinea, 1877–1885." London.
- CHALMERS, J. (1887): "Pioneering in New Guinea." London.
- CHALMERS, J. (1887 A): "On the Manners and Customs of some of the Tribes of New Guinea."—*Proc. Phil. Soc. Glasgow*, xviii. p. 56.
- CHALMERS, J. (1890): "Report on the Toaripi and Koiari Tribes."—*Report Austral. Assoc. Advanc. Sci.*, ii., pp. 811–828.
- CLERCQ, F. S. A. DE, and SCHMELTZ, J. D. E. (1898): "Ethnographische Beschrijving van de West-en Noordkust van Nederlandsch Nieuw-Guinea." Leiden: P. W. M. Trap.
- COMRIE, P. (1876): "Anthropological Notes on New Guinea."—*J. A. I.*, vi., p. 102.
- COUPPÉ, L. Cf. JOURN.
- D'ALBERTIS, L. M. (1880): "New Guinea: What I Did and what I Saw." London. (Cf. *Journ. Anth. Inst.*, vi., 1876, p. 216.)
- EDELFIELD, E. G. (1887): "Travels in the Neighbourhood of Mount Yule." Cf. *Lindt.*, p. 126.
- FINSCH, O. (1888): "Anthropologische Ergebnisse einer Reise in der Südsee und dem malayischen Archipel in den Jahren 1879–1882."—*Zeits. f. Ethnol.*, xv., 1888. Suppl.
- FINSCH, O. (1885): "Ueber Bekleidung, Schmuck und Tätowirung der Papuas der Südostküste von Neu-Guinea."—*Mitt. d. Anth. Ges. Wien.*, xv. Translated in *Rev. d'Ethnogr.*, v., 1886, p. 49.
- FINSCH, O. (1887): "Hausbau, Häuser und Siedelungen an der Südostküste von Neu-Guinea."—*Mitt. Anth. Ges. Wien*, xvii., p. 1.

- FINSCH, O. (1888): "Samoafahrten: Reisen in Kaiser Wilhelms-Land und Englisch-Neu-Guinea in den Jahren 1884 u. 1885." Leipzig: F. Hirt & Sohn.
- FINSCH, O. (1888 A): "Ethnological Atlas: Types from the Stone Age of New Guinea." Leipzig: F. Hirt & Sohn.
- FINSCH, O. (1888 B, 1891): "Ethnologische Erfahrungen und Belegstücke aus der Südsee."—*Annal. des k. k. naturhist. Hofmus.*, Vienna, A. Hölder. "New Guinea: (1) British New Guinea, (a) South East Coast," vol. iii. (1888), pp. 293-364; "(b) East Cape and D'Entrecasteaux Islands," vol. vi. (1891), pp. 13-33; "(c) Trobriand," pp. 33-36. "(2) Kaiser Wilhelms-Land," pp. 37-130.
- FORBES, H. O. (1890): "The Owen Stanley Range, New Guinea."—*Proc. Roy. Geog. Soc.*, xii., p. 562.
- FLOWER, W. H. (1879): "Catalogue of Museum of Royal College of Surgeons: I.—Man."
- GILL, W. WYATT (1876): "Life in the Southern Isles." London.
- GILL, W. WYATT (1885): *Cf.* CHALMERS.
- HADDON, A. C. (1890): "The Ethnography of the Western Tribe of Torres Straits."—*Journ. Anth. Inst.*, xix., p. 297.
- HADDON, A. C. (1890): "Legends from Torres Straits."—*Folk-Lore*, i., pp. 47-81, 172-196.
- HADDON, A. C. (1891): "The Tugeri Head-Hunters of New Guinea."—*Internat. Arch. f. Ethnogr.*, iv., p. 177.
- HADDON, A. C. (1893): "The Secular and Ceremonial Dances of Torres Straits."—*Ibid.*, vi., p. 131.
- HADDON, A. C., and RAY, S. H. (1893). *Cf.* RAY.
- HADDON, A. C. (1894): "The Ethnography of British New Guinea."—*Science Progress*, Oct., Nov.
- HAMY, E. T. (1888): "Étude sur les Papouas de la Mer D'Entrecasteaux."—*Rev. d'Ethnogr.*, vii., p. 508.
- HAMY, E. T., and QUATREFAGES. *Cf.* QUATREFAGES.
- JOUËT, V. (1887): "La Société des Missionnaires du Sacré-Cœur dans les Vicariats apostoliques de la Mélanésie et de la Micronésie." Issoudun.
- JUKES, J. B. (1847): "Narrative of the Voyage of H. M. S. 'Fly.'" London.
- LAWES, W. G. (1879): "Ethnological Notes on the Motu, Koitapu, and Koiari Tribes of New Guinea."—*Journ. Anth. Inst.*, viii., p. 369.

LAWES, W. G. (1888): "Grammar and Vocabulary of Language spoken by Motu Tribe (New Guinea), with Introduction by the Rev. G. Pratt." Sydney: C. Potter.

LINDT, J. W. (1887): "Picturesque New Guinea." London.

LYNE, C. (1885): "New Guinea." London.

MACFARLANE, S. (1876): "Notes from New Guinea."—*Athenæum*, No. 2562, p. 725.

MACGILLIVRAY, J. (1852): "Narrative of the Voyage of H. M. S. 'Rattlesnake.'" London.

MACGREGOR, W. (1890): "Journey to the Summit of the Owen Stanley Range, New Guinea." *Proc. Roy. Geog. Soc.*, xii., 1890, p. 198.

MACGREGOR, W.: Despatches and Reports in the following:—

"Annual Report of British New Guinea." Brisbane. C. A., 18, 1890 (4th September, 1888, to 30th June, 1889); C. A., 105, 1890 (1st July, 1889, to 30th June, 1890); C. A., 1, 1892 (1st July 1890, to 30th June, 1891); C. A., 1, 1898 (1st July, 1891, to 30th June, 1892).

"Further Correspondence respecting New Guinea." London. C., 6323, 1891 (contains pp. 37-48 of C. A., 18, 1890; pp. 25-98 of C. A., 105, 1890; and pp. 1-18 of C. A., 1, 1892); C. 5883, 1890 (July, 1885, to July, 1889).

All the important reports of official explorations and administrative duties published in the White Colonial Annual Reports are reprinted in the Blue Books ("Further Correspondence"), with the exception of certain sketches and a very valuable series of maps, vocabularies, and scientific appendices, all of which occur only in the former series. In the Blue Books are a number of letters and other matters of an administrative nature which throw light on various aspects of the relations of the white race with the natives, missionary efforts, and so forth.

MANTEGAZZA, P. (1877): "Studii antropologici ed etnografici sulla Nuova Guinea."—*Arch. p. l' Antrop. e la Etnol.*, vii., p. 1.

MEYER, A. B. (1889): "Masken von Neu Guinea und dem Bismarck Archipel."—*Königl. ethnogr. Mus. z. Dresden*, vii.

MORESBY (1876): "Discoveries and Surveys in New Guinea and the D'Entrecasteaux Islands." London.

NAVARRÉ, L. *Cf. JOURN.*

NISBET, HUME (1891): "A Colonial Tramp," vol. ii. London.

PARTINGTON, J. EDGE, and HEAPE, C. (1890): "Ethnographical Album of the Pacific Islands." Palmer, Howe & Co., Princess street, Manchester.

- POWELL, B. F. S. BADEN- (1892): "In Savage Isles and Settled Lands." London.
- QUATREFAGES and HAMY, E. T. (1882): "Crania Ethnica." Paris.
- RATZEL, F. (1890): "Völkerkunde II. Die Naturvölker Ozeaniens, Amerikas und Asiens."
- RAY, S. H. (1894): "The Languages of British New Guinea."—*Journ. Anth. Inst.*, xxiv., 1894, p. 15; an amplification of a Paper published in 1893 in the *Trans. Ninth Internat. Congress Orientalists*, London, 1892, ii., p. 754.
- RAY, S. H., and HADDON, A. C. (1893): "A Study of the Languages of Torres Straits, with Vocabularies and Grammatical Notes," Part I.—*Proc. Roy. Irish Acad.* (3), ii., p. 463.
- ROMILLY, H. H. (1887): "The Western Pacific and New Guinea."
- ROMILLY, H. H. (1889): "From my Verandah in New Guinea: Sketches and Traditions." London.
- RYE, E. C. (1884): "Bibliography of New Guinea."—*Roy. Geog. Soc. Suppl. Papers*, i.
- SCHMELTZ, J. D. E. Cf. CLERCQ.
- SERGI, G. (1892-3): "Die Menschenvarietäten in Melanesia."—*Arch. f. Anthropol.*, xxi., p. 389. "Le Varietà umane della Melanesia."—*Boll. Roy. Accad. Med. Roma*, xviii.
- STONE, O. C. (1880): "A Few Months in New Guinea." London.
- TETZLAFF, W. (1892): "Notes on the Laughlan Islands."—*Ann. Rep. Brit. New Guinea*, C. A. 1. 1892, p. 104, reprinted in *Journ. Anth. Inst.*, xxi., p. 488.
- THOMAS, OLDFIELD (1885): "Account of a Collection of Human Skulls from Torres Straits."—*Journ. Anth. Inst.*, xiv., 1885, p. 328; cf. also (1884), "Report on the Zoological Collections, Voyage of H. M. S. 'Alert,' 1881-82." (Two skulls from Naggir.)
- THOMSON, BASIL H. (1889): "New Guinea: Narrative of an Exploring Expedition to the Louisiade and D'Entrecasteaux Islands."—*Proc. Roy. Geog. Soc.*, xi., pp. 525-542 and map.
- THOMSON, J. P. (1892): "British New Guinea." London.
- TURNER, W. Y. (1878): "The Ethnology of the Motu."—*Journ. Anth. Inst.*, vii., p. 470.
- TURNER, W. (1880): "Two Masks and a Skull from Islands near New Guinea."—*Journ. Anat. and Phys.*, xiv., p. 475.
- VÉRIUS, S. H. Cf. JOURT.

EXPLANATION OF PLATE I.

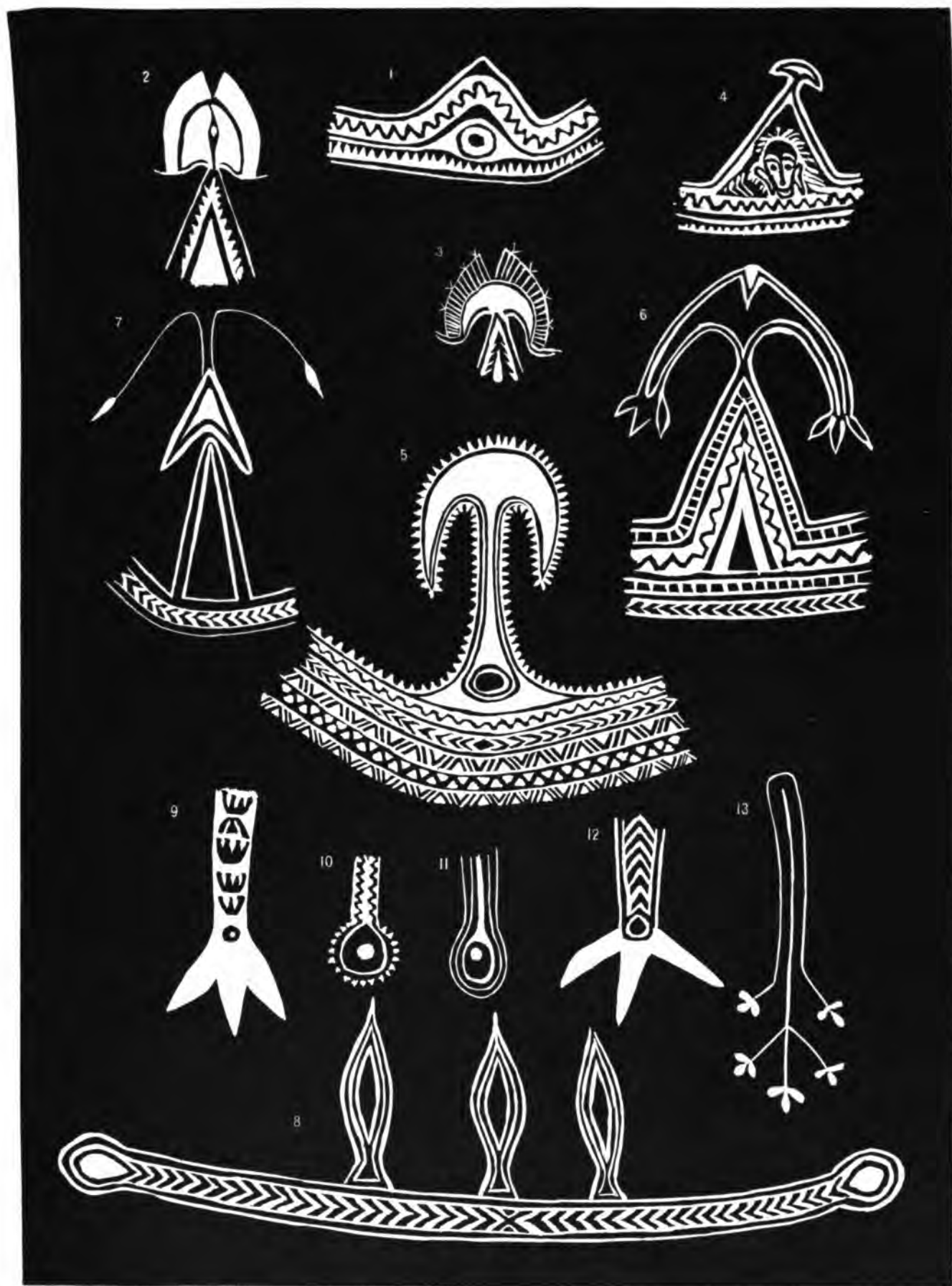
THE DECORATIVE ART OF BRITISH NEW GUINEA.

PLATE I.

TORRES STRAITS DISTRICT.

Figure

- 1-7. The central part of the ornamentation of the upper jaw of the large drums, *warup*
Reduced one-half from rubbings.
1. Muralug; British Museum (C. C. 6915; Kennett Collection).
 2. Nagir; Author's Collection.
 3. (No locality); Edinburgh Museum (1885. 84).
 4. (No locality); Cambridge Museum (o. III. 92. 9). The upper line and terminal loop are coloured red in the original.
 5. Tud; British Museum (C. C.; Haddon Collection).
 6. Nagir; Mr. J. Edge-Partington's Collection (collected by Author).
 7. Saibai; Mr. A. Goldie's Collection. The central white triangular space is coloured red in the original.
- 8-12. Band-ornaments on *warup*. Reduced one-half from rubbings.
8. Nagir; Mr. J. Edge-Partington's Collection (*cf.* fig. 6, *supra*).
 9. Mer; Professor C. Stewart's Collection (collected by Author).
 10. Tud; British Museum (*cf.* fig. 5, *supra*).
 11. Nagir; Author's Collection (*cf.* fig. 2, *supra*).
 12. Saibai; Dresden Museum (6357).
13. Design on a small drum, *buruburu* (no locality); Cambridge Museum (o. III. 86. 71);
cf. fig. 17 c, p. 43.



EXPLANATION OF PLATE II.

THE DECORATIVE ART OF BRITISH NEW GUINEA.

PLATE II.

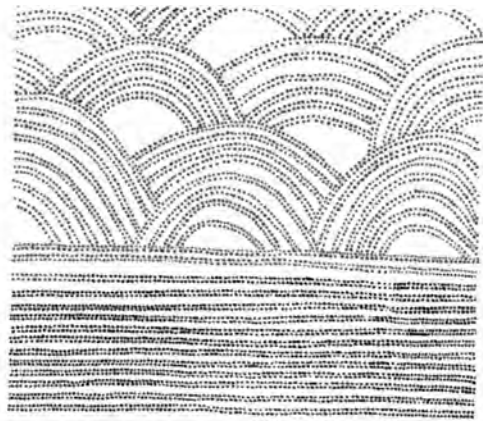
TORRES STRAITS DISTRICT.

Designs etched on bamboo tobacco-pipes. Natural size. All traced from rubbings.

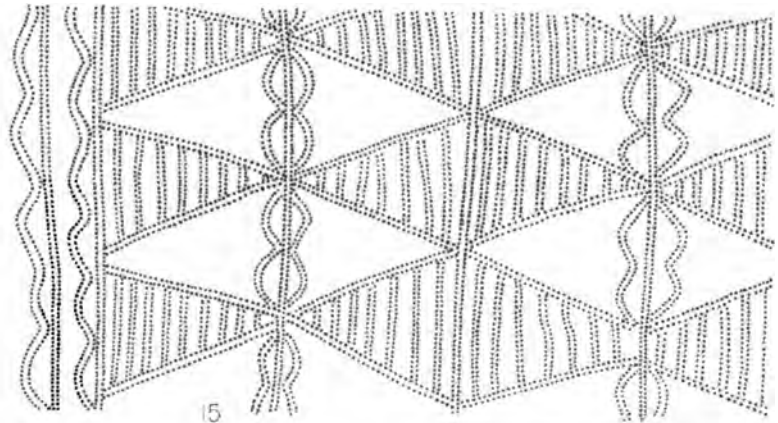
Figure

14. (No locality); British Museum (Ea. 4). For whole pipe, see fig. 6 A, p. 19.
15. "Cape York"; British Museum (6950; Kennett Collection). This "tobacco-box" may have been procured at Cape York, but it was certainly decorated by one of the natives of Torres Straits.
16. "Cape York"; British Museum (6520; Armit Collection). The same remark applies to this as to the former. For whole pipe, see fig. 6 B, p. 19.
17. (No locality); British Museum (Douglas Collection).
18. "Cape York"; British Museum; original in very fine zigzags.

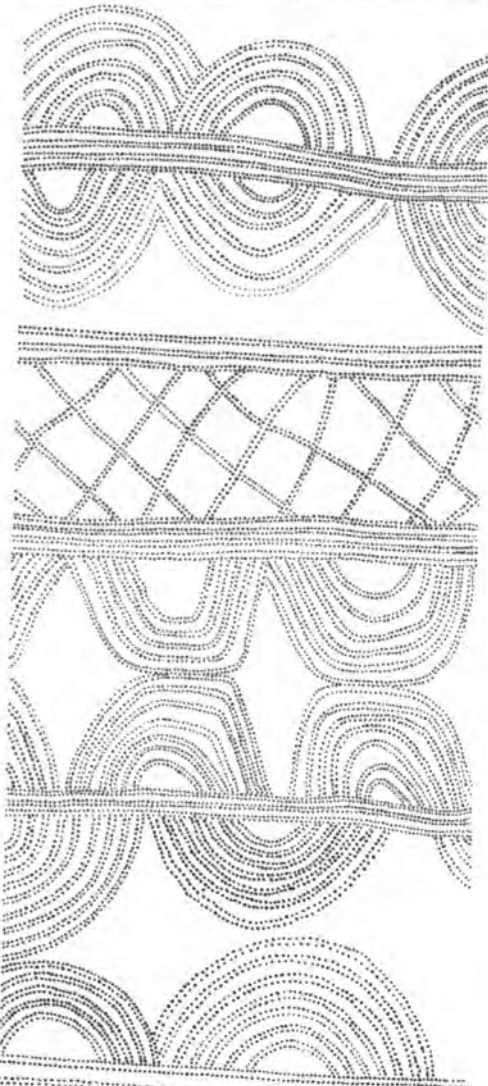
In figs. 14 and 16 the long axis of the pipes runs the same way as the plate; in fig. 15 the long axis of the object runs across the page.



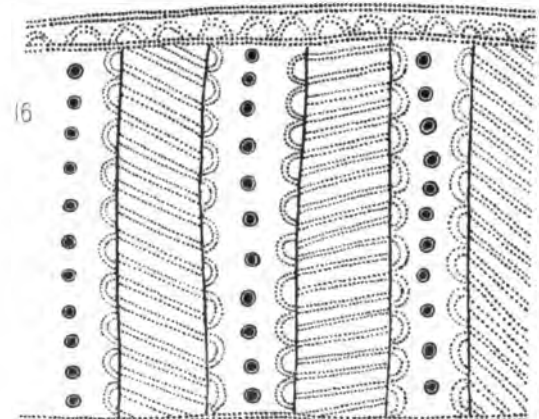
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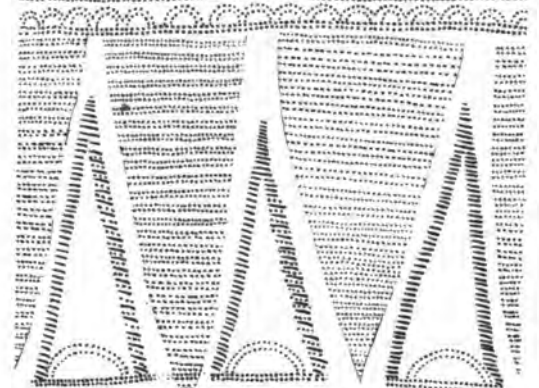
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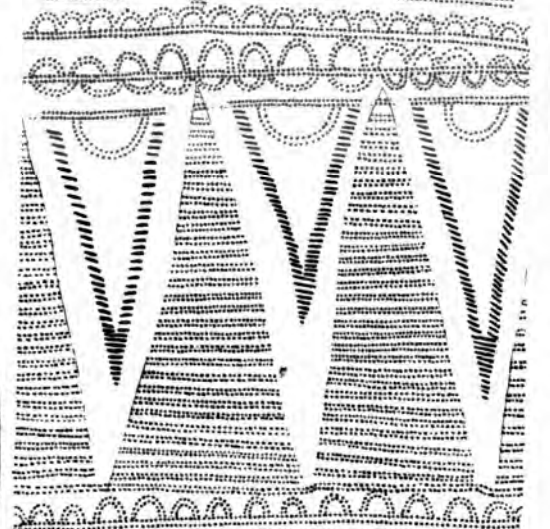
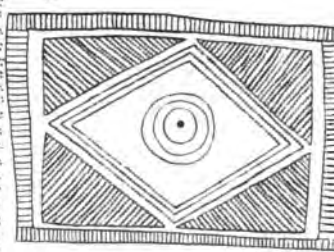
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17



18



EXPLANATION OF PLATE III.

THE DECORATIVE ART OF BRITISH NEW GUINEA.

PLATE III.

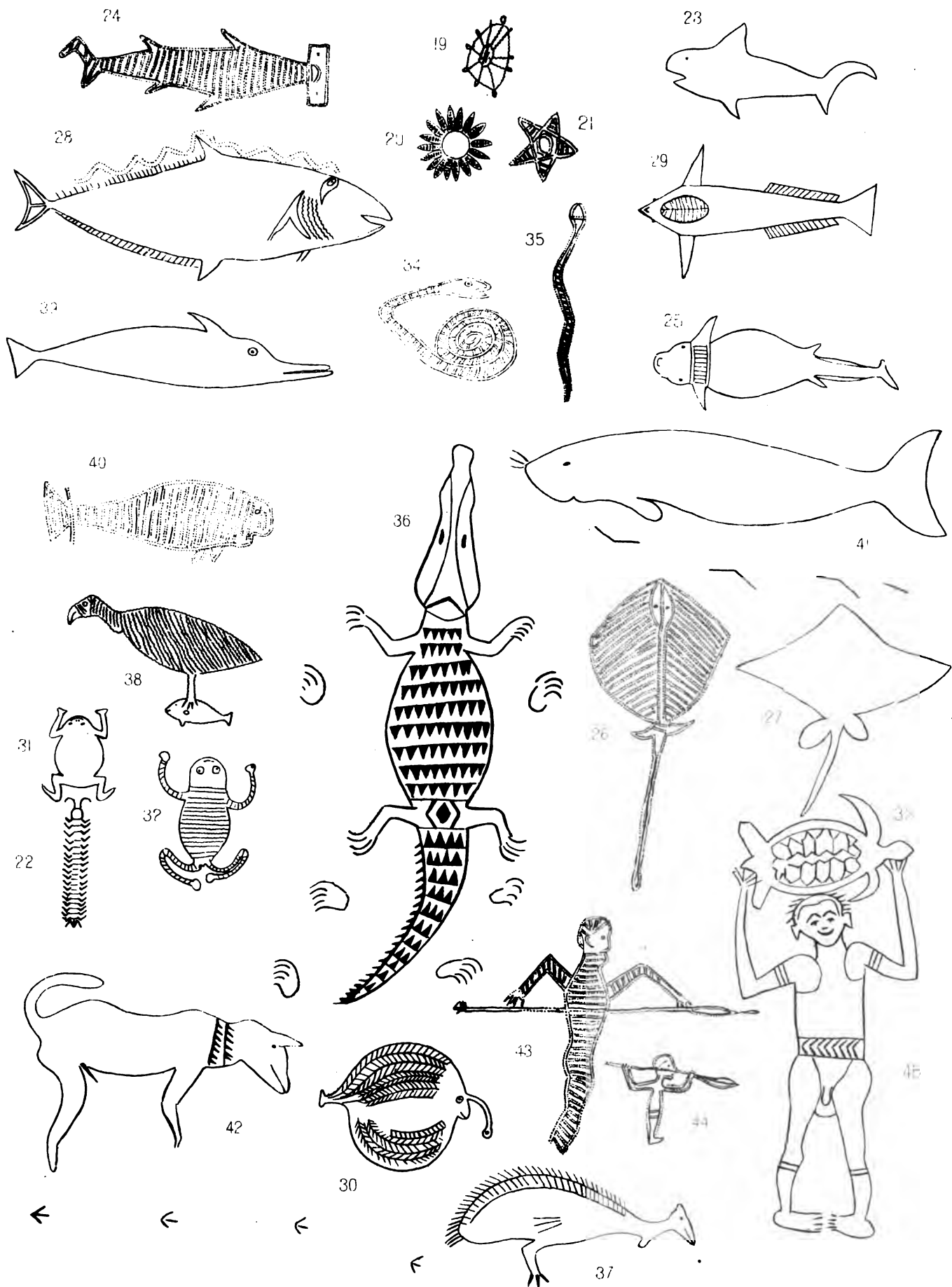
TORRES STRAITS DISTRICT.

REPRESENTATION OF ANIMALS.

Figure

19. Jelly-fish ?; tobacco-pipe; Muralug; British Museum (6521 Armit. Coll.).
20. Sunstar ?; do., do., do. do.
21. Star-fish ?; do., Parama; do. (Haddon Coll.).
22. Centipede (*Scolopendra*); dugong harpoon; Mer; Glasgow Museum (89. 67 al.).
23. Shark (*Charcodon rondeletii* ?); pearl shell; Berlin Museum (vi. 657).
24. Hammer-headed shark (*Zygæna*); Parama; *cf.* fig. 21.
25. Zebra- or tiger-shark (*Stegostoma tigrinum* ?); British Museum (Douglas Coll.). In the other drawing on this pipe the body of the shark is covered with transverse lines.
26. Sting-ray (*Trygon*); Parama; *cf.* fig. 21.
27. Eagle-ray (*Aëtobatis narinari* ?); *warup*; Cambridge Museum (o. iii. 86. 71a).
28. Queen-fish (*Chorinemus lysan* ?); Muralug; *cf.* fig. 19.
29. Sucker-fish (*Echineis naucrates*); pearl shell; Berlin Museum (vi. 657).
30. Larval *Gymnodont* ?; wooden comb; *cf.* fig. 3a, p. 16; Mer; British Museum (Haddon Collection).
31. Tree-frog (*Hyla cœrulea*); Mer; *cf.* fig. 22.
32. Tree-frog (*Hyla cœrulea*); tobacco-pipe; Oxford Museum.
33. Green turtle (*Chelone viridis*); *warup*; Saibai; British Museum (3401).
34. Snake (*tabu*); "Cape York"; British Museum (6520); *cf.* Pl. II., fig. 16; for whole pipe, see fig. 6a, p. 19.
35. Snake (*pagi*); Parama; *cf.* fig. 21.
36. Crocodile (*Crocodylus porosus*); Saibai; *cf.* fig. 33.
37. Casowary (*Casuarus*); *buruburu*; *cf.* fig. 17 c, p. 43; Cambridge (o. iii., 86. 71).
38. Sea-eagle (*Haliæetus*); Muralug; *cf.* fig. 19.
39. Dolphin (*Delphinus* ?); British Museum; *cf.* fig. 25.
40. Dugong (*Halicore australis*); Parama; *cf.* fig. 21. The animal is represented with a rope tied round its tail.
41. Dugong (*Halicore australis*); *warup*; Rev. E. B. Savage Collection; *cf.* fig. 15, p. 39.
42. Dingo (*Canis dingo*); Saibai; *cf.* fig. 33.
43. Man with dugong harpoon; Parama; *cf.* fig. 21.
44. Man with dugong harpoon; part of the rope is also drawn; *cf.* fig. 21.
45. Man with a turtle; Saibai; *cf.* fig. 33. The man is wearing a belt, *wakau* armlets (*musur*), and leglets (*makamak*).

All the above are reduced about one-half, except figs. 22, 31, which are reduced about one-quarter.



EXPLANATION OF PLATE IV.

THE DECORATIVE ART OF BRITISH NEW GUINEA.

[7]

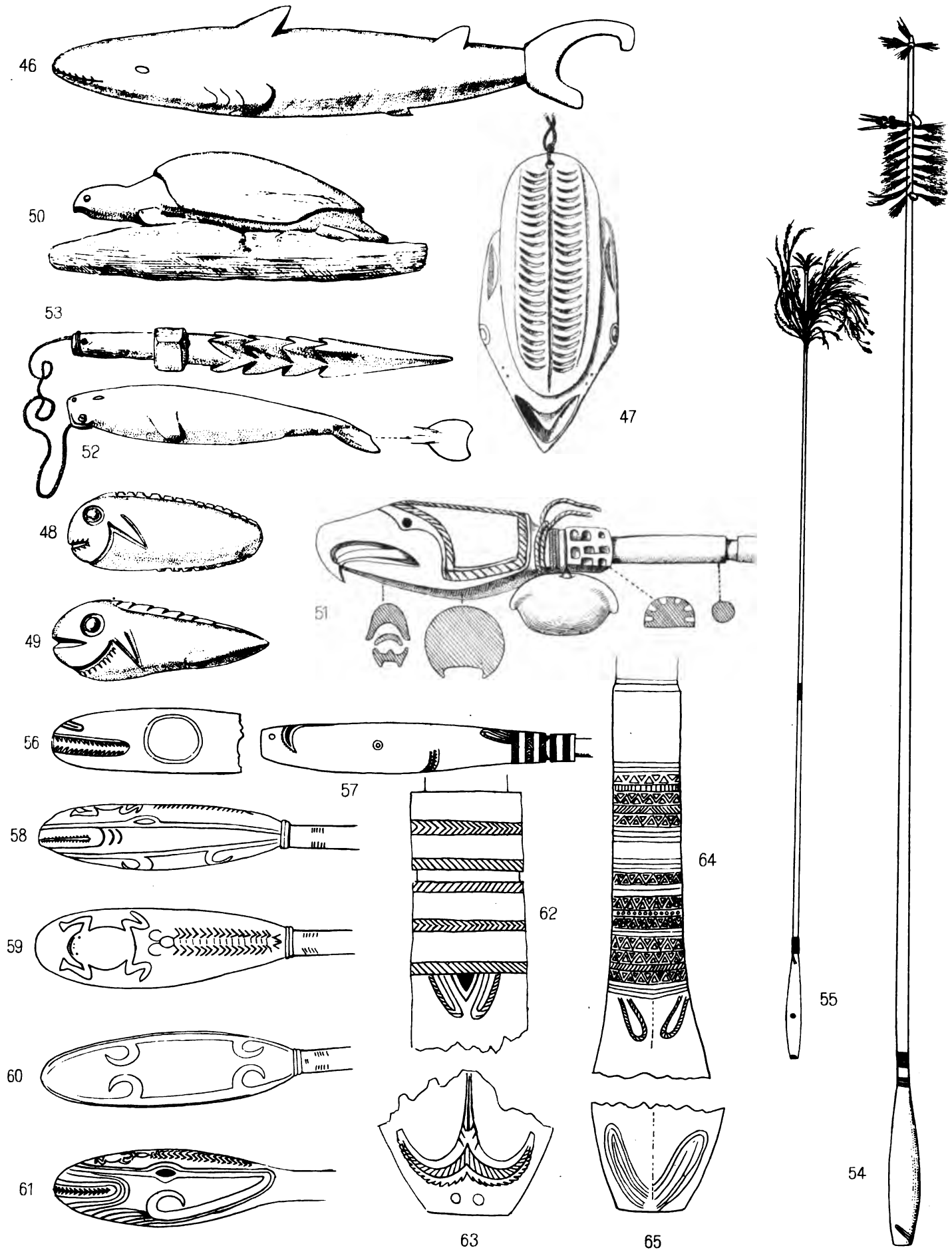
PLATE IV.

TORRES STRAITS DISTRICT.

Figure

46. Shark (*Charcarodon*?) carved in wood; length 171 mm.; Liverpool Museum.
47. Upper surface of head of sucker-fish (*Echineis naucrates*) carved in wood, with pearl-shell eyes; Nagir; length 150 mm.; British Museum; cf. "Album," pl. 334, No. 4.
48. Fish charm, *gwis*, carved in stone; Mer; length 130 mm.; Glasgow Museum (89. 67. bk.; Bruce Collection).
49. Fish charm, *gwis*, carved in stone; Mer; length 152 mm.; Glasgow Museum (89. 67. bj.).
50. Green turtle carved in wood; Tud; total length 184 mm.; British Museum (C. C.; Haddon Collection); cf. "Album," pl. 342, No. 1.
51. Head of a bird carved in wood; about one-third natural size; Dresden Museum (6409).
52. Dugong charm, *déger*, carved in wood; Mer; length 160 mm.; Author's Collection.
53. Wooden dart, *kwir*, of dugong harpoon; Mer; length 200 mm.; Author's Collection.
54. Dugong harpoon, *wap*; Muralug; length 4600 mm (15 ft. 1 in.). The extreme end, which is square in section, is decorated with four bunches of cassowary feathers; the quadrangular piece, which follows a bare cylindrical portion, is decorated with eight rows of four bunches of cassowary feathers, two ovulum shells, rags, and five rattle-seeds (*Pangium edule*).
55. Dance *wap*; Mer; length 1460 mm.; Author's Collection.
56. Butt end of *maid wap*, *omaiter*; Mer; length 234 mm.; British Museum (C. C.; Haddon Collection).
57. Butt end of *wap*; Mabuiag; length of head and neck 590 mm., vertical diameter 79 mm.; British Museum (C. C.); cf. "Album."
- 58-60. Side, upper, and under view of butt end of a *wap*; Mer; length of head 230 mm.; Glasgow Museum (89. 67. al.; Bruce Collection).
61. Side view of similar *wap*; length of head 230 mm.; British Museum (C. C., 3283; MacFarlane Collection).
62. Band ornament of fig. 57.
63. Nostril ornament of same.
64. Band ornament of a *wap* belonging to Maino, chief of Tud.
65. Nostril ornament of same.

Figs. 46, 48, 49, 51, 54, 56, 64 are from sketches by the Author; figs. 57-63 from sketches and rubbings; figs. 47, 50 are from photographs kindly taken for Author by Mr. H. Oldland of the British Museum; figs. 52, 53, 55 are drawn from the objects by Mr. Wilson.



EXPLANATION OF PLATE V.

THE DECORATIVE ART OF BRITISH NEW GUINEA.

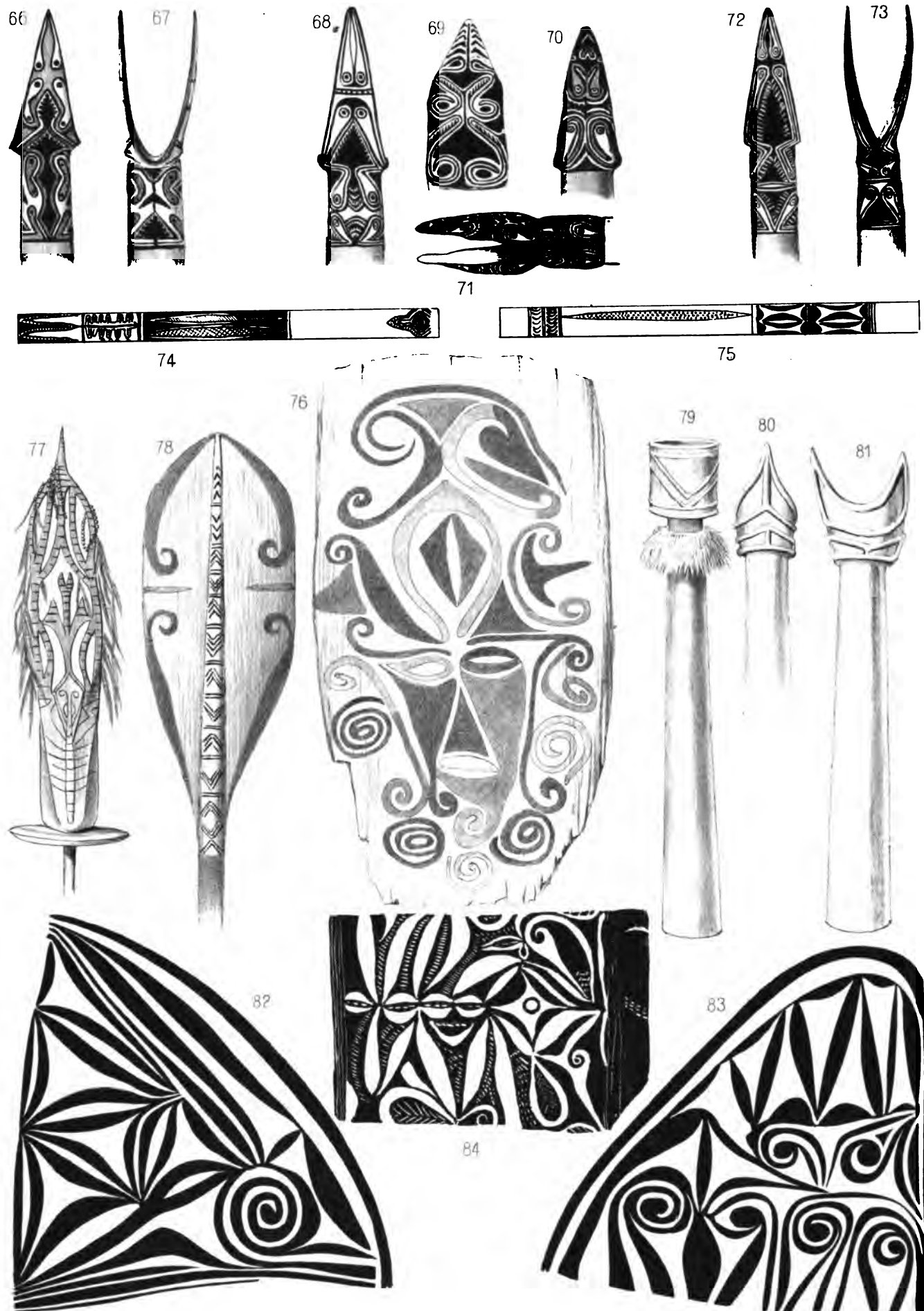
PLATE V.

FLY RIVER DISTRICT.

Figure

- 66, 67. Upper and side view of the head, or open end, of a drum, *gama*; obtained at Sumaiut, Kiwai Island, by Rev. E. B. Savage; coloured black, white, and red.
68. Upper view of head end of a drum in the Author's Collection; coloured black and white; the total length of this drum is 815 mm., and that of the decorated portion is 425 mm.; probably from Kiwai Island.
69. Decoration on one side of the Pigville drum, reduced one-tenth, from a rubbing; the spaces included within the double black lines, and their continuations are coloured red; British Museum (8833).
- 70-71. Upper and side views of the head of a drum probably from Kiwai; coloured black, white, and red; Glasgow Museum (89. 67. em.).
- 72-73. Upper and side views of a similar drum to fig. 66, and obtained on the same occasion coloured black and white.
74. Bamboo tobacco-pipe; Fly River; 580 mm. long, 39 mm. diam.; Rome (2522).
75. Bamboo tobacco-pipe; Fly River; 580 mm. long, 37 mm. diam.; Rome (2524).
76. Carving on the bark of a tree; Fly River; the intaglio portions are coloured pale pink, deep yellow ochre, and a kind of chocolate pink; these colours are indicated in the figure by the three tones of shading. The bark is of a light colour mottled with brown. The carving measures 435 by 230 mm.; Rome (2020).
77. *Baratu*; Fly River; pierced stone carving, forming a head to a disc-shaped stone club, length of carving 575 mm., breadth 84 mm.; coloured with red ochre, and decorated with black lines, Coix lachrymæ seeds, and cassowary feathers. The disc-shaped stone of the club is somewhat irregular in contour, and measures 155 by 140 mm. in diameter; Rome (2014).
78. Blade of paddle, 575 × 220 mm., total length of paddle 3020 mm.; the groups of chevrons and the tranverse lines on the midrib are alternately black and red; the scrolls are black, and the central lines on the blade are red; the under side is coloured red and black; there is no carving, all the designs being painted; Fly River; Rome (2870).
79. Drum, 895 mm. long, 120 mm. diameter at tympanic end; the space between the double narrow beads is coloured red; Fly River; Rome (2576).
- 80, 81. End and side view of drum, 885 mm. long, 120 mm. diameter at tympanum; the bead is coloured black and all the intaglio spaces red; Fly River; Rome (2577).
82. Reduction from rubbing of one side of the head of a drum of the *buruburu* type 1800 mm. in length and 210 mm. in diameter at tympanum; the shaded parts are coloured red. Taking the open end as the front end of the drum, and the handle as being on the upper surface, this carving would be on the right side, the border to the left of the figure bounds the rim of the open end, the lower side of the figure is on the dorsal median line of the drum. Fly River; about one-fifth natural size; Rome (2575).
83. Similar reduction of another drum, 1100 mm. in length; Fly River; about one-fourth natural size; Rome (2574).
84. Reduction from rubbing of a bamboo tobacco-pipe, 735 mm. in length; the light and dark parts should be reversed; Fly River: one-fifth natural size; Rome (2529).

All the figs., except 68, are from sketches or rubbings by the Author. Figs. 74-84 were collected by D'Albertis from the "Fly River," in June and July, 1876.



EXPLANATION OF PLATE VI.

THE DECORATIVE ART OF BRITISH NEW GUINEA.

[37*]

[11]

PLATE VI.

PAPUAN GULF DISTRICT.

Figs. 85-92, Oblong shields; figs. 93-97, oval shields; figs. 98-103, ceremonial tablets
from an *eramo*.

Figure

- 85. (No history.)
- 86. Berlin Museum.
- 87. "Motu-Motu"; more probably from Maiva (*cf.* "List of New Guinea Photographs by Rev. W. G. Lawes," No. 73: H. King, George-street, Sydney); length 1040 mm.; breadth 495 mm. (3 ft. 5 in. by 1 ft. 7½ in.); Glasgow Museum (89. 67. ao.; Bruce Collection).
- 88. Berlin Museum.
- 89, 90. Exhibited in Melbourne Exhibition of 1888.
- 91. Length 820 mm.; breadth 340 mm.; Berlin Museum.
- 92. Kerrama; length 760 mm.; breadth 285 mm.; Berlin Museum (vi. 6772).
- 93. Length 955 mm.; breadth 460 mm.; Cambridge Museum (o. III. 89. x. 5).
- 94. Length 955 mm.; breadth 330 mm.; British Museum (Romilly Collection); *cf.* "Album," pl. 282, No. 2.
- 95. Length 740 mm.; breadth 215 mm.; Cambridge Museum (o. III. 89. x. 5a).
- 96. Length 660 mm.; breadth 152 mm.; British Museum (87. 2. 7; Romilly Collection); *cf.* "Album," pl. 282, No. 1.
- 97. Length 737 mm.; breadth 178 mm.; British Museum (87. 2. 7; Romilly Collection).
- 98, 99. Two sides of same object, *gopi*; Kerema; length 540 mm.; breadth 135 mm.; Author's Collection).
- 100. Length 1410 mm.; breadth 330 mm.; Dublin Museum (334. 90).
- 101. Length 1280 mm.; breadth 340 mm.; Dublin Museum (340. 90).
- 102. Length 1210 mm.; breadth 240 mm.; Dublin Museum (338. 90).
- 103. Length 1550 mm.; breadth 360 mm.; Dublin Museum (339. 90).

Figs. 98, 99 were drawn by Mr. Wilson from the object; all the remainder were copied or traced from photographs, and supplemented in many cases by the Author's sketches. For fig. 87 the Author is indebted to the Director of the Glasgow Museum; for figs. 100-103 to the Director of the Dublin Museum; for figs. 94, 96, 97 to Mr. H. Oldland; figs. 89, 90 are from photographs by Mr. Lindt, of Melbourne.

85



86



87



88



89



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92



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94



100



101



102



103



95



97



96



98



99



EXPLANATION OF PLATE VII.

THE DECORATIVE ART OF BRITISH NEW GUINEA.

PLATE VII.

MASKS FROM THE PAPUAN GULF DISTRICT.

Figure

- 104. Height 380 mm.; British Museum (87, 2-7); *cf.* "Album," pl. 316, No. 2.
- 105, 106, 107. Three views of the same mask; Motu-Motu; length 570 mm.; Glasgow Museum (89. 67. bg.; Bruce Coll.).
- 108. Motu-Motu; length 470 mm.; Glasgow Museum (89. 67. bf.; Bruce Coll.).
- 109. (No history.)
- 110. Length 890 mm., breadth 520 mm.; Dublin Museum (332. 90).
- 111. Length 1855 mm., breadth 410 mm.; Dublin Museum (346. 90).
- 112. Kerama; height of mask, without fringe, 2045 mm.; Glasgow Museum (89. 67. ba.; Bruce Coll.).
- 113. From a photograph by Lindt of a mask in the Melbourne Exhibition of 1888.
- 114. Length 660 mm., breadth 400 mm.; Dublin Museum (348. 90).
- 115. Length 1220 mm., breadth 560 mm.; Dublin Museum (349. 90).
- 116. Length 2440 mm., breadth 970 mm.; Dublin Museum (351. 90).
- 117. Elema District, total length of mask 2100 mm., total height of mask 3660 mm.; Edinburgh Museum (1887. 620).
- 118. Model of a bird; length 700 mm., breadth 680 mm.; Author's Collection.

Fig. 104 is from a sketch by Mr. J. Edge Partington; figs. 105-108 are from sketches by the Author; all the remainder are from photographs; for figs. 110, 111, 114-116 the Author is indebted to the Director of the Science and Art Museum, Dublin; and for fig. 117 to the Director of the Science and Art Museum, Edinburgh; fig. 112 is from a photograph taken by the Author in Torres Straits.



EXPLANATION OF PLATE VIII.

THE DECORATIVE ART OF BRITISH NEW GUINEA.

PLATE VIII.

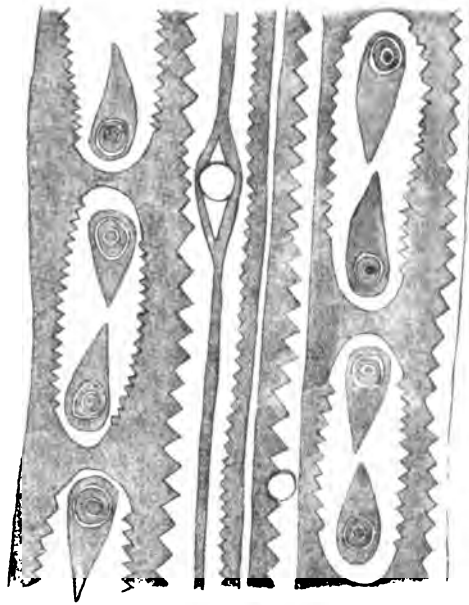
PAPUAN GULF DISTRICT.

Figure

119. Part of the ornamentation of a bamboo tobacco-pipe; Kerrama; the bands run round, not along the pipe; the hole for the bowl is shown; length of pipe 622 mm.; diameter 72 mm.; Rome Museum (33707).
- 120, 121. Coconut spoon; one-half natural size; Glasgow Museum (89. 77. cs.; Bruce Coll.).
122. Handle of coconut spoon; two-fifths natural size; Cambridge Museum (o. III. 89. x. 4).
123. " " " " " " " " " (o. III. 89. x. 4a).
124. Charm made from a small coconut; Australian Museum, Sydney.
125. " " " " " " " " "
126. Head ornament; diameter 67 mm.; Glasgow Museum (87. 30. q).
127. " " " 73 mm.; " " "
128. Pearl-shell head ornament; Motu-Motu; diameter 120 mm.; Glasgow Museum (89. 67. cl; Bruce Collection).
129. End of club; one-fifth natural size; Cambridge Museum (o. III. 89. x. 2).
130. " " " " " British Museum (+ 4341).
131. " " " " " " " (+ 4339).
132. " " " " " " " (+ 5430).
- 133, 134. Drum; sketched by Author; exhibited in the Melbourne Exhibition of 1888.
135. Comb; Maipua, Panaroa River; about two-fifths natural size; Author's Collection.

Figs. 119, 121, 126-132 are from rubbings; figs. 120, 133, 134 from the Author's sketches; and figs. 122, 123, 135 are drawn from the objects by Mr. Wilson.

119



126



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121



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123



124



125



129



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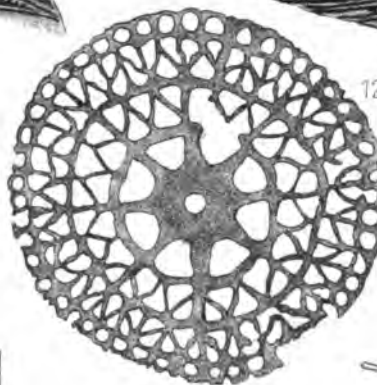
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135



EXPLANATION OF PLATE IX.

THE DECORATIVE ART OF BRITISH NEW GUINEA.

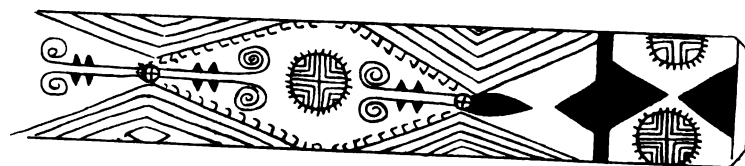
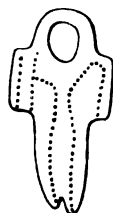
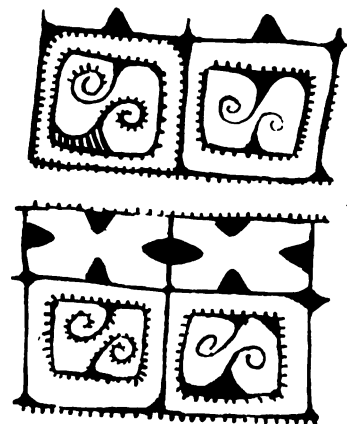
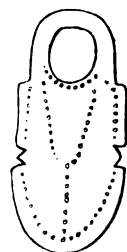
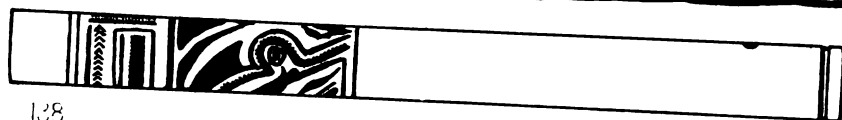
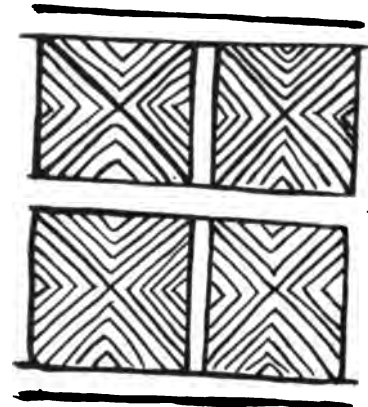
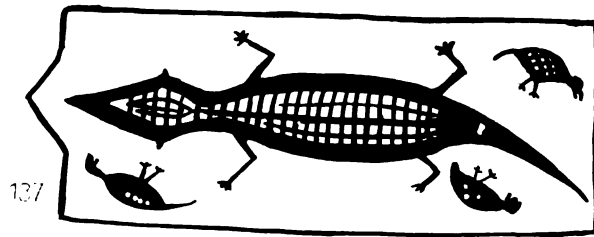
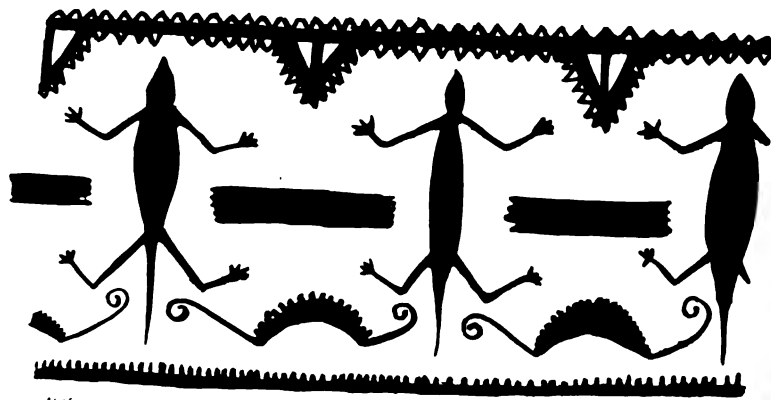
PLATE IX.

CENTRAL DISTRICT.

Figure

136. Band pattern on a bamboo tobacco-pipe from Maiva, probably representing lizards, feather headdresses and the band, *sihi*, worn by men.
137. Panel on a pipe labelled from Kerama, possibly from Maiva, containing a lizard, probably a *Varanus*, and three birds which may be the *Megapodius*; Glasgow Museum (89. 67. dv.; Bruce Coll.).
138. Sketch of a pipe from Maiva.
139. Sketch of a part of the decoration of the last, showing two birds' heads; one is a hornbill, *Buceros*; the other is probably intended for the same, but there was no room left for the horn.
140. Part of the decoration of a pipe from Maiva.
141. Part of the decoration of a pipe from Maiva.
142. Part of the decoration of the same pipe as fig. 137.
143. Part of the ornamentation of bone lime spatula from Yule Island; natural size; Rome Museum (2477); *cf.* D'Albertis, Vol. I., p. 416, No. 31.
144. Part of the decoration of a bone lime spatula from Yule Island; natural size; Rome Museum (2475); *cf.* D'Albertis, Vol. I., p. 416, No. 27.
145. Part of the decoration of a five-pronged bone fork from Yule Island; natural size; Rome Museum (2465); *cf.* D'Albertis, Vol. I., p. 416.
- 146, 147. Turtle-shell earrings from Yule Island; one-half natural size; the designs are pitted, not perforated; Rome Museum (2767 and 2765, respectively).
148. Forehead ornament made of perforated turtle-shell attached to a piece of Cymbium shell, 63 by 55 mm. in diameter; Yule Island; Rome Museum (2761, D'Albertis Coll.).
149. Sketch of the side view of the bowl end of a pipe from Kabadi in the Berlin Museum.
150. Part of the ornamentation of a bamboo tobacco-pipe; one-third natural size; length of pipe 810 mm.; diam. 67 mm.; Edinburgh Museum (1885. 91).

Figs. 136–142, 146–149 are from sketches by the Author; figs. 143–145, 150 are from rubbings.



EXPLANATION OF PLATE X.

THE DECORATIVE ART OF BRITISH NEW GUINEA.

[38*]

[19]

PLATE X.

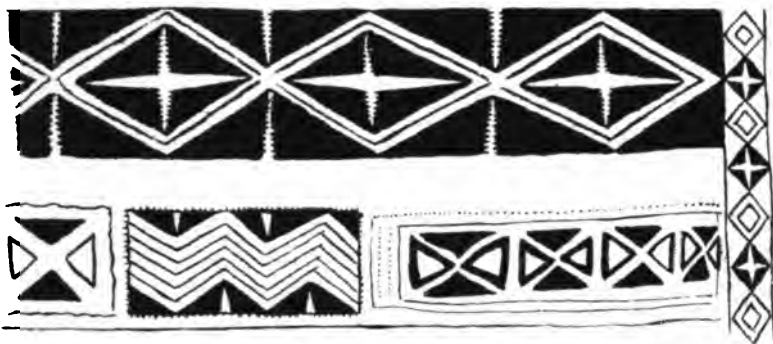
CENTRAL DISTRICT.

Figure

151. Part of the decoration of a pipe from Koiari in the Berlin Museum; from a rough sketch by the Author; the vertical designs are drawn somewhat too regular, and there should be two lines instead of one encircling the upper horizontal row of diamonds.
152. Part of the decoration of a pipe from Kupele, in the Berlin Museum.
153. Bowl end of a pipe from Kupele, in the Berlin Museum (vi. 4332).
154. Design on same pipe from Kupele as fig. 152.
155. „ „ „
156. Part of the decoration of a pipe; one-third natural size. The design to the extreme right is continued in the same style, and for the same length as the corresponding one to the left; the hole for the bowl is in the central space of this design, about 40 mm. from its end. Beyond this design is a bare space of about 25 mm. to the end of the pipe; length of pipe 765 mm.; Cambridge Museum (o. iii. 92. 76. 13).
157. Pipe from Sogeri ("Chogeri"); the original is 485 mm. long, and 60 mm. in diameter; Cambridge Museum (o. iii. 94. 37).
158. Design on a pipe from Sogeri (?), in the Berlin Museum (vi. 4339).
159. "Waist cloth of woolly bark fibres stained with patterns in brown and black on one side, doubled over a string and worn round the waist at the back; Interior, base of Owen Stanley Range," H. O. Forbes; one-tenth natural size; original 740 mm. long, 686 mm. broad; British Museum (+ 3825).
160. Painted Tapa; the original is 1145 mm. long, and 380 mm. broad; two out of the three panels are shown in the figure, which is about one-eighth of the natural size; it probably came from the district north of Redscar Bay; British Museum (McFarlane Collection).
- 161, 162. Panels from a pipe in the Dublin Museum (977. 1884).
- 163, 164, 165. „ „ „ British Museum (+ 1603).

Figs. 151-156, 158-165 from sketches by the Author; fig. 157 drawn from the object by Mr. Wilson; figs. 159, 160 drawn from photographs taken by Mr. Oldland of the British Museum.

151



154



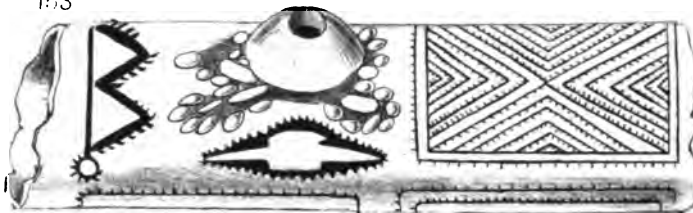
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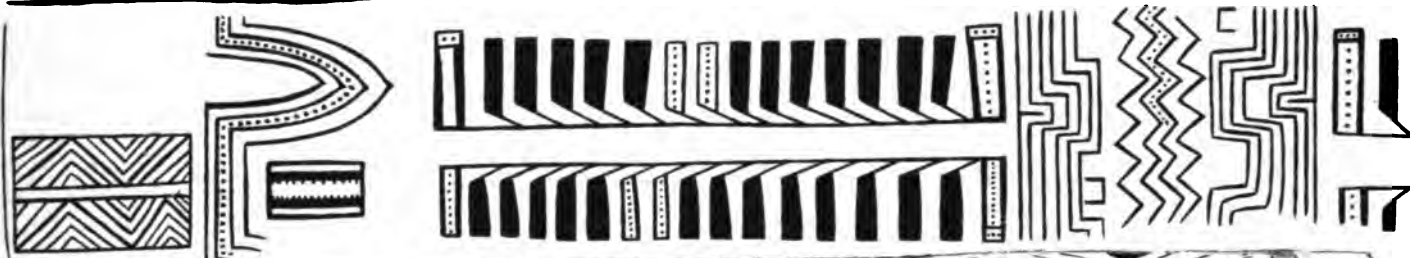
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153



156



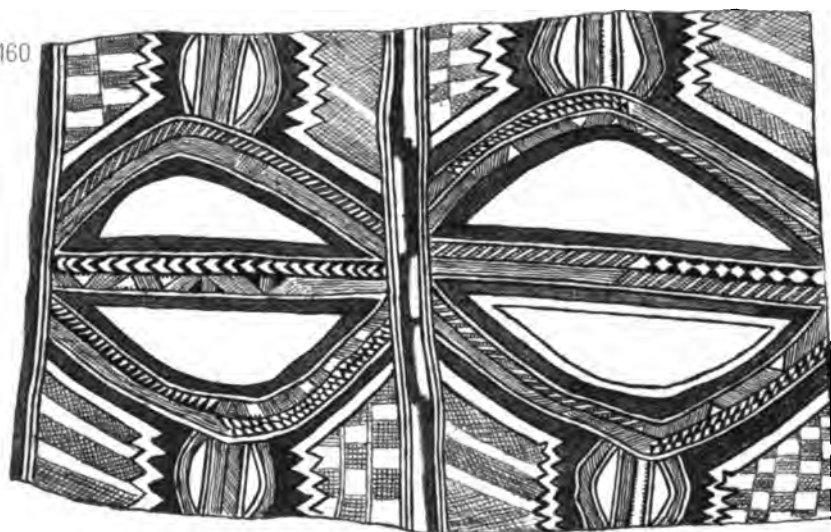
157



159



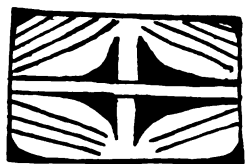
160



158



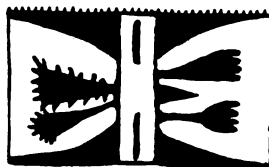
161



162



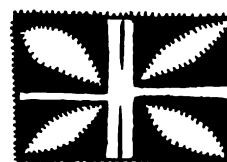
163



164



165



EXPLANATION OF PLATE XI.
THE DECORATIVE ART OF BRITISH NEW GUINEA.

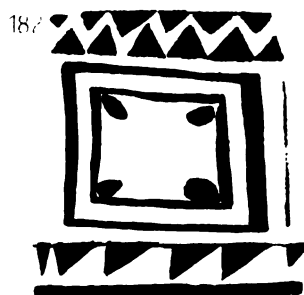
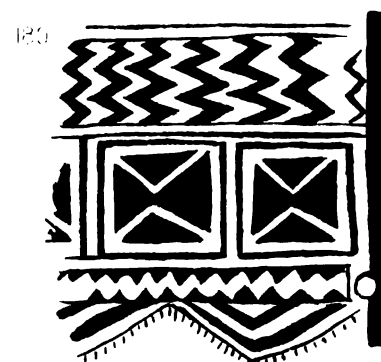
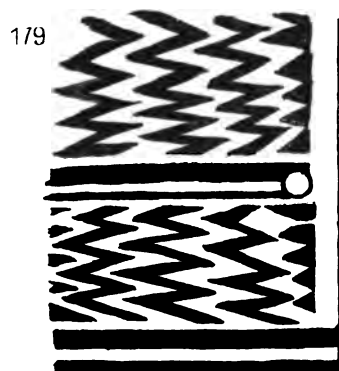
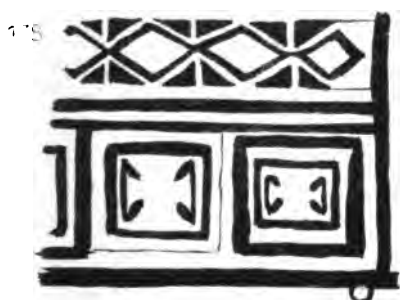
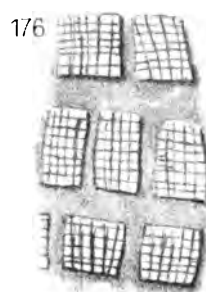
PLATE XI.

CENTRAL DISTRICT.

Figure

166. Lime gourd, with burnt design, British Museum, *cf.* "Album," pl. 279, No. 6.
167. Lime gourd, with burnt design, Kerepunu; one-third natural size; Author's Collection.
- 168, 169, 170, 171. Designs from lime gourds, Kerepunu.
172. Design on a long, narrow club, Kerepunu.
173. Portion of Tapa belt, Kerepunu.
174. ,, ,, ,,
175. Carved coconut vessel; perhaps from Cloudy Bay; Author's Collection.
- 176, 177. Designs from similar vessels.
- 178-183. Portions of design on bamboo tobacco-pipes from Cloudy Bay; the round spot is the hole for the insertion of the bowl; in all cases the length of the pipe is in the same direction as the breadth of the page.
178. Total length of pipe, 390 mm.; diameter, 65 mm.
179. ,, ,, 430 mm.
180. ,, ,, 400 mm.; diameter, 55 mm.
181. ,, ,, 390 mm.
182. ,, ,, 415 mm.
183. ,, ,, 380 mm.

Figs. 166-174 from sketches by the Author; figs. 175-177 drawn from the objects by Mr. Wilson; figs. 178-183 from rubbings; figs. 167-174 were sketched by the Author in Mer (Murray Island) from objects then belonging to the resident missionaries: they are now scattered.



EXPLANATION OF PLATE XII.

THE DECORATIVE ART OF BRITISH NEW GUINEA.

PLATE XII.

MASSIM DISTRICT.

BIRD AND CROCODILE DESIGN.

Figure

184. Part of "a wooden ornament suspended horizontally over graves" at Suau (South Cape). The remaining portion is nearly as long again, and ends in a peg-like point. The sketch is not drawn to scale; the original is coloured black, red, and white. The object is in the possession of Mr. J. W. Lindt, of Melbourne.
185. Carving in wood, part of decoration of canoe, from Wari (Teste Island), coloured black, red, and white; about one-fifth natural size; original about 38 mm. long. In the possession of Mr. V. Bowden.
186. Handle of a spatula; one-half natural size.
187. Handle of a paddle; one-eighth natural size. Glasgow Museum (Bruce Collection, 89. 69. dw.).
188. Handle of a paddle from Tauwara (Milne Bay); the sketch is not to scale. In the possession of Mr. Lindt, of Melbourne.
189. Handle of a paddle; about one-third natural size. The blade of this paddle is leaf-like. In Author's Collection.
190. Handle of a paddle from Tassai (Brumer Island); about two-fifths natural size; length of carving, 217 mm. Cambridge Museum (o. III. 89 x 1 b).
191. Handle of a spatula; about two-fifths natural size. Dublin Museum (1887. 56).
192. Handle of a spatula; a little less than one-half natural size. Leiden Museum.
193. Handle of a spatula from Tubutubu (Engineer Group); about two-fifths natural size. Cambridge Museum (o. III. 90. 79 a).
194. Handle of a paddle; two-fifths natural size. Museum of the London Missionary Society.
195. Handle of a spatula from Tauwara (Milne Bay); a little more than one-half natural size. In the Author's Collection.
196. Handle of a paddle from the Louisiade Archipelago. In the Oxford Museum.
197. Handle of a club. In the Oxford Museum.
198. Handle of a paddle "from Kerepunu"; two-ninths natural size.
199. Handle of a spatula from China Straits; about two-sixths natural size. In the Author's Collection.
200. Handle of a spatula; about two-fifths natural size.
201. Cross-bar of outrigger of canoe; about one-tenth natural size; the length of the bird and crocodile design is 480 mm.; British Museum.
202. Part of the handle of a drum, from China Straits; one-quarter natural size; Glasgow Museum (89. 67 en, Bruce Collection).
203. Handle of a paddle from Rogea (Heath Island), China Straits; length of carving, 140 mm.; Cambridge Museum (o. III. 89. x. 1. a).
204. Handle of a paddle; length of carving, 125 mm.; Cambridge Museum (o. III. 92. 76. 7).
205. Handle of a paddle; length of carving, 140 mm.; Cambridge Museum (o. III. 89. x. 1).

Figs. 184-188, 198, 200-205 are from sketches by the Author; figs. 189, 199 were drawn by Mr. Wilson; figs. 196, 197 are from sketches by Mr. H. Balfour; figs. 190-195 are from rubbings.



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